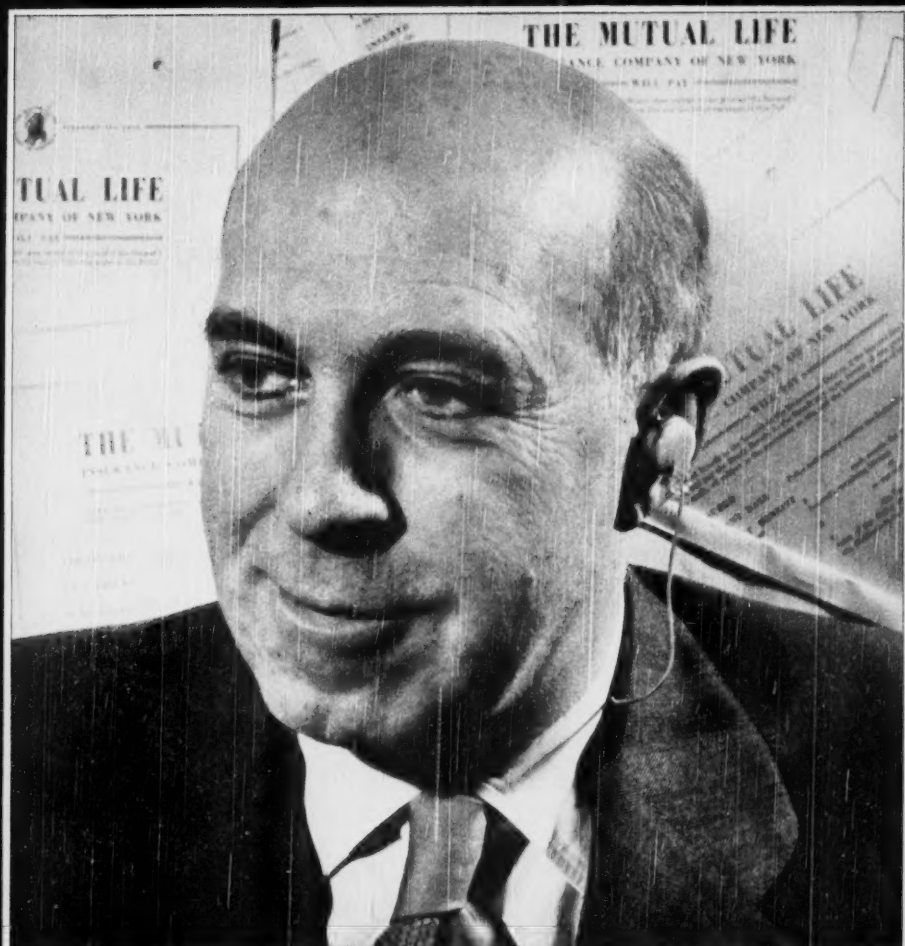


BUSINESS WEEK

Debt
ARE WE SWAMPED?
PAGE 19



Louis W. Dawson: He's moved up to chief executive of Mutual Life (page 126)

A MCGRAW HILL PUBLICATION

MAR. 25, 1950

TWENTY-FIVE CENTS



Studebaker 3/4-ton 8-foot pick-up—1/2-ton 6 1/2-foot and 1-ton 8-foot also available

Studebaker trucks bring you something new in thrift!

GET the tops in earning power as well as pulling power for your new-truck money.

Get the ever-on-the-job reliability of a husky, handsome, modern new Studebaker truck.

Get the stand-up stamina of the massive, rigid, exclusive Studebaker K-member frame.

Get the wear-resisting durability of Studebaker's sturdy axle and spring construction.

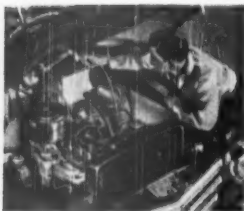
Get the extra thrift of automatic overdrive—now available in Studebaker 1/2-ton and 3/4-ton

trucks—extra cost but extra gasoline economy and greatly reduced engine wear!

Stop in and get the proof of the savings that Studebaker trucks are effecting right now on your kind of work—half-ton to two-ton models in a comprehensive range of wheelbases.

STUDEBAKER TRUCKS

Noted for low cost operation



Just lift the hood! Everything's easy to get at! No standing on a box! No stooping under the dash! Studebaker's unique "lift-the-hood" accessibility saves effort, time and money for you.



Low cab floor—no strenuous climbing! Doors close securely on tight gripping rotary latches. Steps are enclosed inside doors. Adjustable seat cushions. Big-visibility windows, windshields.



"Tops-in-thrift" engines of the truck world! Two great Studebaker truck engines—the Econo-miser and the Power-Plus—develop plenty of horsepower and deliver welcome high torque.



Built to last by father-and-son teams and thousands of other conscientious craftsmen! Studebaker trucks excel in staying power as well as earning power. Studebaker, South Bend 27, Indiana, U. S. A.



Men with hose are changing the shape of the earth

A typical example of B. F. Goodrich improvement in rubber

WITH power from compressed air these men are drilling deep holes in solid rock. Dynamite put in the holes will blow the rock to bits and the bits will then be put back together again into four million tons of concrete. They're making the great "Bull Shoals" dam in Arkansas, one of the world's biggest.

The air hose on such jobs used to go to pieces, too. It was crushed and cut by flying pieces of rock, burned by the hot air and rotted by oil fed into it to lubricate the drills. Sometimes the rubber would harden and crack into

pieces that clogged the tools. When the air finally broke through the wall of a hose, work stopped.

Then B. F. Goodrich men began trying out new rubber compounds. They developed rubber five times as tough as some types of hose. They found rubber linings that could stand heat without scorching or hardening. Modern B. F. Goodrich hose for this use is oil-resisting, stands hot oil without rotting or weakening. At "Bull Shoals" dam, where the shape of the earth is being changed, only B. F. Goodrich air hose is used, thousands of feet

of it, and much of it will still be good for use on the next job, years later.

Product improvement is a policy and constant program at B. F. Goodrich. If you use air hose or other industrial rubber goods, don't decide any product you may buy is the best to be had without first seeing your BFG distributor and finding out what B. F. Goodrich may have done recently to improve it. The B. F. Goodrich Company, Industrial and General Products Division, Akron, Ohio.

B.F. Goodrich
RUBBER FOR INDUSTRY



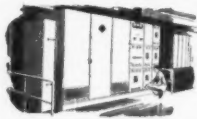
Improved Equipment Increases Production of Pulp and Paper . . .



Improved A-C "Streambarker"* rapidly strips pulpwood logs of bark, deadwood and dirt. Uses high-pressure jets of water to clean over 1,000 average 4-ft. pulp logs per hour!

*Streambarker is an Allis-Chalmers trademark.

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plus all food, clothes, gadgets and furnishings that come packed in paper . . .

plus the dollars you spend for them . . .

It's a fabulous total!

Just as fabulous are the industrial operations behind paper—barking the logs, grinding the pulp, providing the power, finishing the product.

Allis-Chalmers has a hand in them all . . . with equipment for wood and pulp preparation—for the generation, distribution and control of electric power—for many steps in the processing of fine paper itself!

Paper making is just one of thirty basic industries that benefit from Allis-Chalmers' 103 years of machine-building experience!

ALLIS-CHALMERS MANUFACTURING COMPANY
301 South 70th Street, Milwaukee 1, Wisconsin



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One of the Big 3 in Electric Power Equipment—
Biggest of All in Range of Industrial Products

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ANY TYPE
MATERIAL



Many Towmotor Fork Lift Trucks feature specially designed accessories engineered for the job—such as this revolving inverter device to "stir up" entire pallet loads of canned milk. There are many other Towmotor "firsts" developed to speed up every type of Mass Handling job . . . cut production time and costs . . . increase productive output. For more information, write for a copy of "Materials Handling Illustrated." Towmotor Corporation, Division 2, 1226 E. 152nd St., Cleveland 10, Ohio. Representatives in all Principal Cities in U. S. and Canada.



Ask to see

the new Towmotor movie, "The One Man Gang," in your office

TOWMOTOR
THE ONE-MAN-GANG

**FORK LIFT TRUCKS
and TRACTORS**

RECEIVING • PROCESSING • STORAGE • DISTRIBUTION

BUSINESS WEEK

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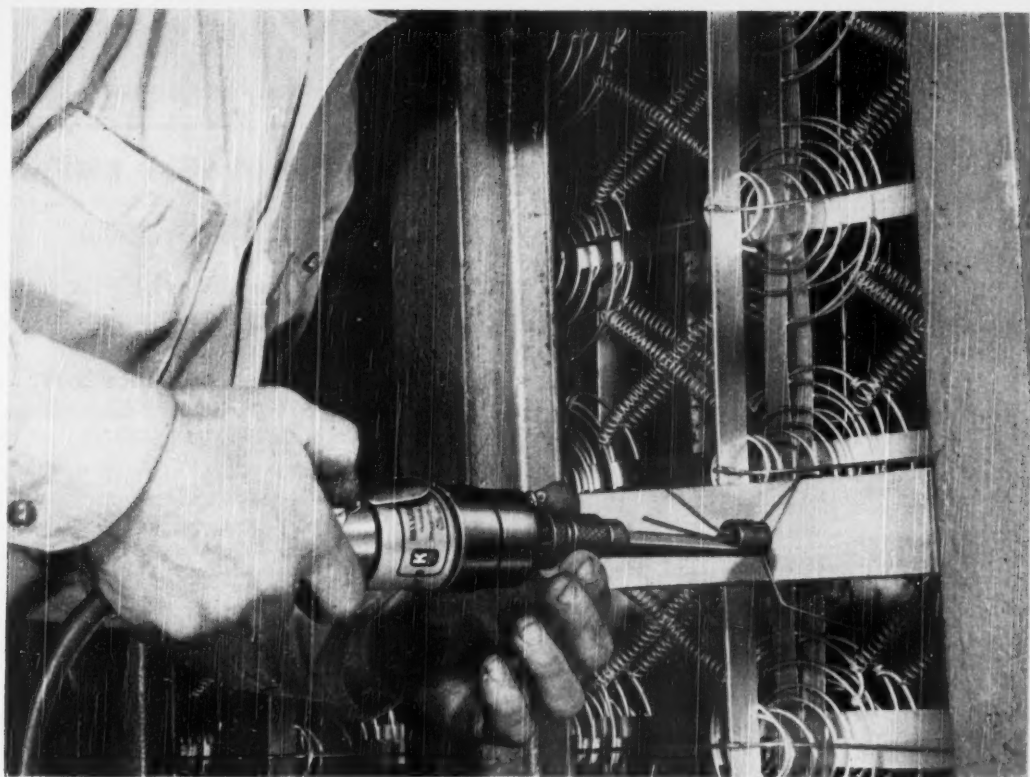
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BUSINESS WEEK • Mar. 25, 1950



FAT BED SPRINGS ARE COMFORTABLE ...BUT THEY ARE SPACE ROBBERS TO SHIP AND STORE

AN ADAPTATION OF KELLER AIR TOOLS

Strange as it may seem, the bed spring . . . very symbol of rest . . . once caused extreme fatigue to workers in a plant where they are manufactured.

It all happened in the shipping room. Bed springs are lightweight, but very bulky, fat, space-robbing articles. To crate them for shipment, workmen in one factory used to compress the springs as much as they could, then wire down the compressed spring to wooden slats.

Baling wires were drawn up around the springs, twisted together, the loose wire ends cut off with a hand tool. Tiring, time-consuming job!

It was a challenging problem . . . but not long ago Keller engineers came up with the answer . . . a specially designed wire-twisting adapter added to a Keller standard rotary tool. Two or three turns and the new pneumatic tool pulls up the baling wires, twists them together, cuts

off loose ends . . . as shown in the above picture.

Everybody was pleased; the manufacturer for whom the tool was specially designed eliminated a production headache; workmen found "twisting" easy and fast; Keller solved another problem for industry.

★ ★ ★

In addition to specially designed air tools, like the one described above, Keller's standard line of air hoists, screwdrivers, nut setters, die grinders, chipping hammers, and other work-saving power hand tools are speeding production on a low cost basis.

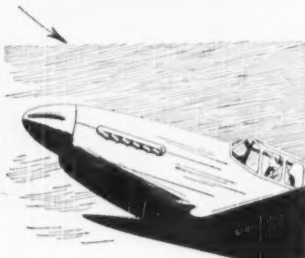
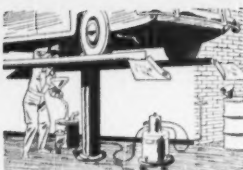
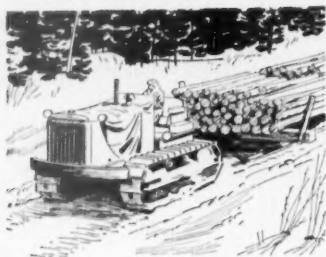


Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.

PRESCRIPTION FOR INDUSTRY'S CHILLS AND FEVERS

Rx



IN SCORES of products and processes exposed to heat or cold, Wyandotte Glycols are "just what the doctor ordered." Hard to freeze, slow to boil, these even-tempered chemicals are proving their worth on industry's toughest proving grounds.

Today, they are being used widely as permanent anti-freezes in cars, trucks, tractors—in breweries, dairies, ice cream plants. They fill the need for coolants in aircraft engines where temperatures range above the boiling point of water alone.

These practically colorless, odorless liquids absorb moisture from the air and evaporate slowly. They

moisten and soften tobacco, cellophane, textile fibers, glue, gelatin and cork.

Glycols also find jobs in the manufacture of brake fluids, wood stains, perfume and cutting oils—as plasticizers and as solvents for oils, resins and dyes. In fact, it is hard to find a modern industry in which these versatile chemicals do not play some part. Chances are they can be used to advantage in the products you make.

Why not write for further data on the properties and applications of Wyandotte Glycols? Just write Wyandotte Chemicals Corporation.



ORGANIC AND INORGANIC CHEMICALS
WYANDOTTE CHEMICALS CORPORATION
Wyandotte, Mich. • Offices in Principal Cities

Wyandotte Chemicals Corporation is one of the world's major producers of soda ash, caustic soda, bicarbonate of soda, chlorine, dry ice and calcium carbonate. Wyandotte produces glycols and related compounds, certain aromatic sulfonic acid derivatives and other organic intermediates. Wyandotte is also the world's largest manufacturer of specialized cleaning compounds for business and industry.

Highlights In This Issue

Up to Our Necks in Debt

• Consumers and businessmen are in deeper than ever before. But results aren't what you might think. P. 19

Truman Loves Little Business

• And new bills before Congress show exactly how much. P. 21

Wanted: Logs, Logs, Logs

• Only trouble with the lumber boom: An essential raw material is in very short supply. P. 22

Those Wonder Drugs

• If you want to lose your shirt, make penicillin. If you want to clean up, find a better drug of your own. P. 26

How Lusty is Housing?

• Good for another year? Two? Three? Dept. of Commerce thinks it knows the answer. P. 36

Sweet Pill for Taxpayers

• The House is in a mood to make the cuts big, the boosts small. P. 94

Coming: An Equity Pinch

• Businessmen will soon be scratching hard for fresh capital, new McGraw-Hill study finds. P. 118

Detroit Pension Fog Clears

• How will auto builders pay for pensions? New Ford agreement should clear up the confusion. P. 113

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NEW BOOK

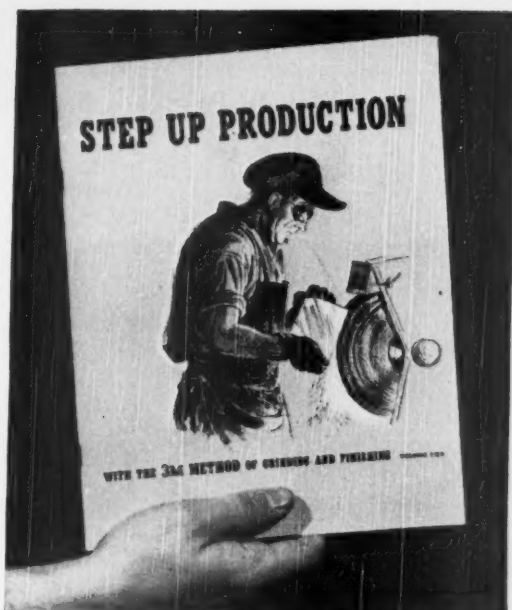
Shows how to cut grinding and finishing costs

Copies now available ...
... yours for the asking

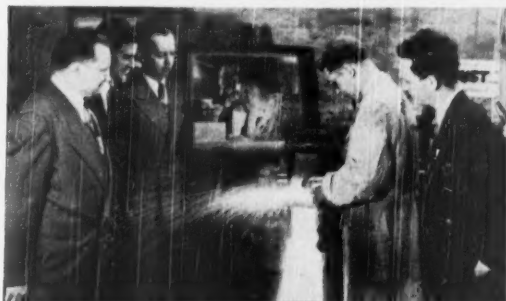
This new booklet covers the subject of industrial grinding and finishing from all angles, through a series of "case histories" taken straight from the production line. Here's the aggregate of 3M's practical experience with belt grinding installations. 36 picture-filled pages showing how to step up your output and cut your unit cost by converting your present equipment to the 3M Method of Grinding and Finishing. Send for your FREE copy today!

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- Cold rolled steel grinding and polishing
- Grinding forged and heat-treated steel
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- Pre-finishing of steel in the flat
- Stainless steel grinding and polishing
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\$20,000 SAVED IN ONE YEAR... 3-step operation cut to one... equipment pays for itself in thirty days! These are samples of the results cited in this new 36 page brochure covering the subject of grinding and finishing with 3M Belts.



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One Way to Obtain a Price "Edge" for Your Products



...Eliminate this High Cost!

The high costs of eye accidents (apparent and hidden) increase the selling price of what you make and lower your profits. Today, when markets are competitive and "break even" points are high, management has found that the installation of an AO eye protection program represents a *definite and important* step in reducing accident costs.

"Definite", because AO records show that there is nothing conjectural about the savings . . . "important" because the savings are *large* — as high as five figures annually in some cases. Ask your AO Safety Representative for complete details.

**Industrial
Eye Accident Costs
UP 78½%***

SINCE 1939

FACTS TO REMEMBER—

Average eye accidents cost industry over \$5 per employed worker per year . . . cost over \$328 per injured worker in compensation . . . are 98% preventable by goggles costing approximately \$2.30.

American Optical
COMPANY
SAFETY PRODUCTS DIVISION



Southbridge, Massachusetts • Branches in Principal Cities

BUSINESS OUTLOOK

BUSINESS WEEK

MARCH 25, 1950



The inventory situation is helping business keep sturdy.

Manufacturers of durable goods, in particular, seem to be short of purchased materials and parts. The total is 30% under a year ago. Producers of nondurable goods hold 6% less.

But the finished-goods picture isn't as pretty. Inventories aren't much under a year ago—when a glut was developing.

In other words, if consumer demand were to fall off even a little, there would be too much stuff in warehouses and on shipping platforms.

•
Consumer demand, so far, shows no serious signs of falling off.

Retail dollar volume last month was the same as a year ago. This was sustained by gains of 18% for autos and accessories, 14% for furniture, and 12% for lumber and building materials, the Commerce Dept. says.

But these big gains for hard goods seem to be somewhat at the expense of soft goods. Food sales were off a little. And apparel and general merchandise fell 9% behind a year ago.

•
One of the biggest complaints about business in New York City is the slowness in apparel. But, with a relatively late Easter, this situation may yet take a turn for the better.

•
Consumers have plenty of dollars to support their spending spree.

Even without the GI insurance distribution, the personal income rate is running a little ahead of last year's \$211.9-billion.

If the GI checks are included, the figure is close to \$220-billion.

But not all the income is spent in the month received. Some goes into savings. And, at a time when debts are high (page 19), a lot of it goes to pay for things bought earlier.

•
Appliance sales continue to boom—which, in turn, reflects on demand for raw materials.

Iron Age notes that appliance makers' steel orders have an unusual impact now. That's because they are mainly for steel sheets.

James J. Nance, Hotpoint chief, sees demand carrying on. He thinks this year will "equal or surpass" 1949. Entering 1950, inventories were depleted at all levels, he says, "a complete reversal of conditions that prevailed a year ago."

•
One sample of the boom in appliances: Factory sales of vacuum cleaners in February were 9% ahead of the same month last year.

•
Domestic demand for machine tools continues to indicate a possible upturn in manufacturers' outlays for equipment. (That's one of the things that might turn 1950 into a better year than most people expected.)

True, new orders in February were down from January's high level. The National Machine Tool Builders Assn. index of orders was at 88.7 against 99.7 a month earlier.

But here's the catch: Most of the decline was in export business. Orders for U. S. factories were down only a shade.

•
Construction in the oil and gas industry has turned up sharply. That

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

MARCH 25, 1950

can be seen from the business now being done by Dresser Industries, Inc.

The company, supplying a wide range of equipment for oil and gas, had a mild slump late last year. But J. B. O'Connor, executive vice-president, told stockholders this week that February saw quite an improvement.

He added that a higher backlog foretells better "sales and earnings as the season advances and milder weather permits more drilling, pipeline, and construction activity."

•
More and more textile men admit that they aren't getting their share of the boom these days—that they may even be in for another spring dip.

And, as they grumble, they talk about "forcing" retailers to carry a bigger share of inventory. (This they think might be done by refusing quick deliveries on reorders from stores that carry skimpy stocks.)

But retailers aren't much worried. Converters all over are reselling at markdowns. So goods are easy to get.

•
One of cotton's really big losses is in the field of tire fabric.

Up until 15 months ago, use of cotton in tires always topped synthetic fibers. But in the last half of 1949, more than 140-million lb. of synthetics were used against less than 60-million lb. of cotton.

•
Farmers not only are planting more than their acreage quotas. They also are doing something else to intensify surplus problems.

Even though they are overplanting acreage allotments of everything but wheat (page 16), farmers will take more than 20-million acres out of crops already in surplus. But those acres won't stand idle—the farmers will use them for unrestricted crops.

Thus planting of oats will go up nearly 3.5-million acres; grain sorghums, up 2.8-million; barley, up 2.7-million; soybeans, up 2.1-million.

•
A growing surplus of fats and oils is one of the things worrying Washington's farm-policy makers. Another year and Europe will have even less need for it. And here we're boosting soybean planting 15%.

•
That old argument about how long our petroleum reserves will last isn't any closer to an end than it was 20 years or so ago.

We took more than 1.8-billion bbl. out of the ground last year. That's just short of the record—2-billion bbl. in 1948.

Yet proved reserves rose to a new peak of 24,650,000,000 bbl. That's up from 23,280,000,000 bbl. a year earlier.

Incidentally, the rise in reserves isn't just enlargement of existing oil pools. The American Petroleum Institute points out that new discoveries were twice as large as in any other year since 1938.

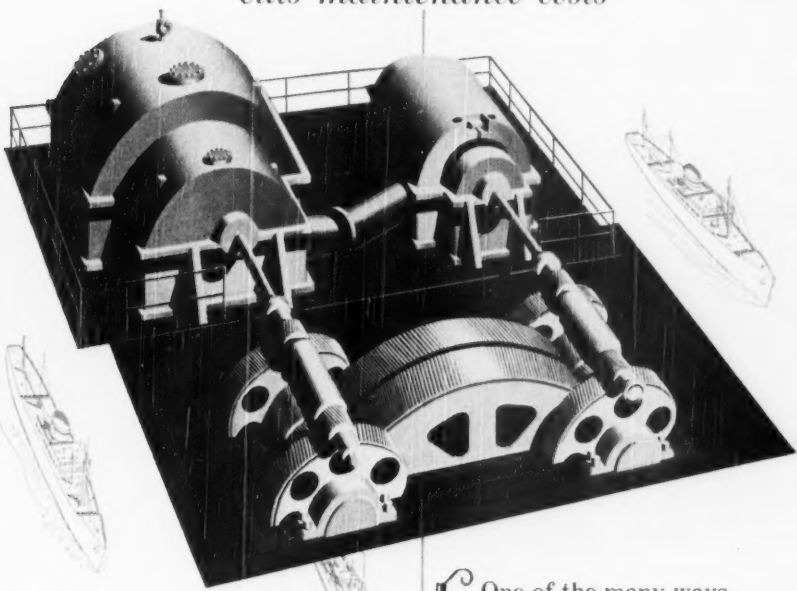
•
Lots of oil men have been talking about the surplus of fuel oil on the West Coast, but Standard of California is doing something about it.

Here's the problem: Big demand for gasoline keeps refineries going full tilt—but that means byproduct fuel oil is being made full tilt, too. Western producers even have been filling tankers and shipping to the East Coast.

Calso's solution is to change the refining ratio—more gasoline, less byproduct. It's a complicated step. But mainly it involves conversion of the company's big "cat cracker" at its Richmond refinery to a new process.

GULF HARMONY OIL

*keeps marine turbine lubricating systems clean,
cuts maintenance costs*



One of the many ways
industry cuts cost

with Gulf Quality Oils and Greases

The lubricating oil for a marine steam turbine has a mighty important job to do. It must protect a huge investment and at the same time help insure continuous operation for safety of passengers and crew while the ship is at sea.

More and more ship operators are turning this vital job over to Gulf Harmony Oil, an oil with an outstanding record of performance in marine turbine lubrication.

This quality oil combines maximum lubricating value with special qualities for marine turbine service. It has superior resistance to oxidation—lasts indefinitely, keeps turbine lubricating systems clean. It separates readily from water. It protects precision-built governor parts against

corrosion. And it will not foam in turbine operation—for it contains Gulf's patented anti-foam agent.

Gulf Harmony Oil is one of an impressive list of contributions by Gulf technologists to improved machine performance and lower costs through better lubrication. For effective help on your lubrication problems, write, wire, or phone your nearest Gulf office today and ask a Gulf Lubrication Engineer to call.

Gulf Oil Corporation • Gulf Refining Company

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Sales Offices - Warehouses

Located in principal cities and towns throughout
Gulf's marketing territory



Helps make machines
produce more at lower cost

BLACK'S

SMART IDEA!

In a unique "tunnel quarry," he mines one of the purest limestone deposits in the whole United States!



Instead of working the usual open-air quarry, Bill Black of Black White Limestone Co., Quincy, Ill., found it pays to go underground . . . to mine 100 feet under the earth's surface to get at one of the finest limestone deposits in the U. S.



With no surface dirt to remove, Black gets only pure, white limestone from his quarry. He's able to mine night and day, the year 'round, regardless of weather. And Bill Black has found out, too, it pays to use Ford Trucks!

BLACK'S

SMART MOVE!

He changes to Ford Trucks because "...they outwork trucks costing twice as much—do more per dollar!"

"On this job you've got to have a truck that can take it 16 hours a day, 6 days a week—that's why I changed to Ford," says Bill Black. "You need trucks, too, that are easy on up-keep. We haven't had a breakdown with Fords on the job. With 8-ton loads rolling every 3½ minutes—reliability like this really pays off!"



Smart idea for YOU. Change to FORD and get these money-saving features!

- A choice of two V-8's and two 6-cylinder engines in over 175 models saves by fitting the job better
- Loadomatic Ignition saves gas
- Aluminum alloy pistons save oil
- Double channel frame saves through bigger load capacity
- Engine-top selling of accessories saves on maintenance
- Bonus Built reserves of strength and power save by giving you bigger load capacity and better performance.



Hauled up 30° grades to the outside, the limestone is dumped into a crusher and the truck goes back for another load. Says Mr. Black, "Good gasoline and

oil mileage is still another big part of Ford Truck economy. We get wonderful gasoline mileage—each truck climbs those steep grades 75 times a day!"



"You sure need Ford brakes on this job!" says Ford Dealer M. Carrott to Black. He tells him about Ford Bonus-Built construction and removable brake drums with inspection hole for easy maintenance, as well as longer brake life.

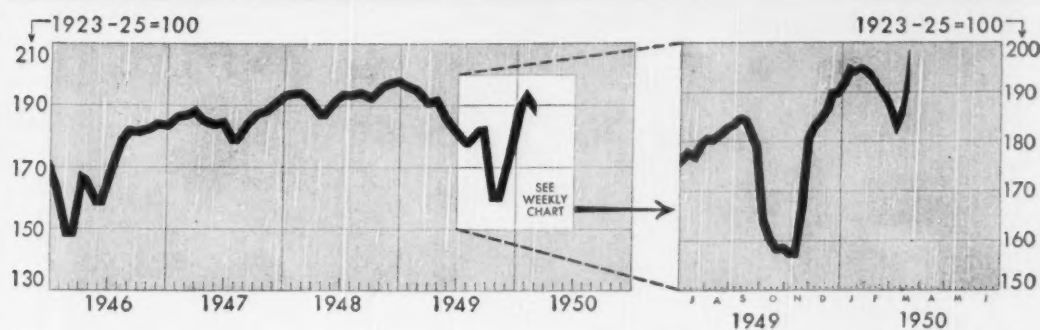


"Ford's the truck for me from now on!" says Bill Black. "I knew Ford Trucks Last Longer—that's one reason I decided to change. Now that I've found they cost less to run, too—I'd think twice before buying any other make!"

**Ford Trucks Cost Less Because—
FORD TRUCKS LAST LONGER**

Using latest registration data on 6,106,000 trucks, life insurance experts prove Ford Trucks last longer!

FIGURES OF THE WEEK



Business Week Index (above) *198.4 †189.4 189.8 191.4 162.2

PRODUCTION

Steel ingot operations (% of capacity).....	95.5	89.8	88.8	101.1	97.3
Production of automobiles and trucks.....	134,555	†124,563	123,712	120,741	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$31,937	\$34,200	\$28,593	\$25,473	\$19,433
Electric power output (million kilowatt-hours).....	6,015	5,937	5,931	5,496	3,130
Crude oil and condensate (daily average, 1,000 bbls.).....	4,844	4,827	4,997	5,202	3,842
Bituminous coal (daily average, 1,000 tons).....	2,200	513	432	1,780	1,685

TRADE

Miscellaneous and l.c.l. carloadings (daily average, 1,000 cars).....	69	68	69	74	86
All other carloadings (daily average, 1,000 cars).....	49	27	26	44	52
Money in circulation (millions).....	\$27,023	\$27,105	\$26,993	\$27,500	\$9,613
Department store sales (change from same week of preceding year).....	-1%	None	None	-8%	+17%
Business failures (Dun & Bradstreet, number).....	208	221	218	210	228

PRICES (Average for the week)

Cost of Living (U. S. Bureau of Labor Statistics, 1935-1939 = 100) .. Jan. 166.9	167.5	170.9	105.2
Spot commodity index (Moody's, Dec. 31, 1931 = 100).....	355.7	356.1	357.2	368.6	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	219.3	219.1	220.9	257.2	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	303.5	305.1	303.2	291.4	146.6
Finished steel composite (Iron Age, lb.).....	3.837¢	3.837¢	3.837¢	3.714¢	2.396¢
Scrap steel composite (Iron Age, ton).....	\$28.42	\$27.92	\$27.42	\$34.92	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	18.500¢	18.500¢	18.500¢	23.500¢	12.022¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$2.28	\$2.26	\$2.23	\$2.23	\$0.99
Sugar (raw, delivered New York, lb.).....	5.55¢	5.56¢	5.51¢	5.59¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	31.90¢	31.88¢	32.29¢	32.63¢	13.94¢
Wool tops (New York, lb.).....	\$1.839	\$1.818	\$1.783	\$1.488	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	19.83¢	19.42¢	19.67¢	19.50¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	138.3	136.5	136.2	118.3	78.0
Medium grade corporate bond yield (Ban issues, Moody's).....	3.23%	3.24%	3.24%	3.46%	4.33%
High grade corporate bond yield (Aaa issues, Moody's).....	2.59%	2.58%	2.58%	2.70%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½-1½%	1½-1½%	1½-1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1½-1½%	1½-1½%	1½-1½%	1½-1½%	4-½%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	47,236	46,711	46,930	46,182	††27,777
Total loans and investments, reporting member banks.....	66,855	66,283	66,977	62,359	††32,309
Commercial and agricultural loans, reporting member banks.....	13,889	13,798	13,905	15,095	††6,963
Securities loans, reporting member banks.....	2,052	1,918	2,050	1,891	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	36,877	36,463	36,975	33,112	††15,999
Other securities held, reporting member banks.....	5,326	5,327	5,225	4,358	††4,303
Excess reserves, all member banks.....	1,370	970	1,040	990	5,290
Total federal reserve credit outstanding.....	18,264	18,363	18,581	22,348	2,265

*Preliminary, week ended Mar. 18.

††Estimate (BW—Jul. 12 '47, p. 16).

†Date for "Latest Week" on each series on request.

‡Revised.



"IS THIS MY LAST FLIGHT, DOC?"

"You get to thinking in a hospital bed. And ever since the control button on my mining car jammed and I crashed into the wall, I wondered what was going to happen to me. Sure, my leg was busted, but I knew I was ripped up inside, too. So, I got to worrying.

"Then one day my wife came in, acting kind of nervous, and tells me they want to fly me 500 miles to Dallas. 'They've got better equipment there and specialists to take care of you,' she says. Well, right then I knew I was hurt even worse than I'd imagined.

"They flew me to Dallas, all right — and you'd have thought I was the King of Siam . . . they chartered a plane just for me . . . flew a special nurse and doctor all the way from Dallas to look out for me on the trip . . . and fitted out the plane like a hospital room. There was even a place for my wife to sit beside me all the way.

"Maybe you know how my story is coming out. It couldn't be better. You see, I thought I was going to die. But those Dallas doctors and nurses sure knew just what to do. Give me three more months and I'll be back on the job — living proof that it pays to have good doctors and nurses, and a good boss and a good insurance company, all in my corner."

Liberty Mutual works to provide the best possible medical services for injured employees of policyholders, wherever located. This benefits the workers by helping them to get well more quickly and by restoring them to earning power at the earliest date consistent with good rehabilitation. It also benefits employers by reducing their insurance costs and increasing production. Liberty Mutual sets the pace in providing business insurance that better serves workers and employers alike.



We work to keep you safe

LIBERTY MUTUAL INSURANCE COMPANY
LIBERTY MUTUAL FIRE INSURANCE COMPANY

★ *We work to keep you safe . . . by providing protection for business, home and car owners . . . by removing the causes of home, highway and work accidents . . . by relieving the pain and financial burden of accidents by prompt and friendly handling of claims.* ★

WASHINGTON OUTLOOK

BUSINESS WEEK

WASHINGTON BUREAU

MARCH 25, 1950



Truman has lost control over the tax bill now shaping up. The House Ways & Means Committee is writing its own ticket—with its eyes more on the fall elections than on Truman's orders. This is even encouraged by some of Truman's leaders.

The committee is having its own way on excises, won't stick to the limited list of cuts the Treasury offered.

It's out to trim not only wartime excises on transportation, communications, furs, luggage, and jewelry, but also the rates on autos, trucks, buses, parts and accessories, radios, record players, washing machines, home refrigerators, light bulbs, and admissions.

The cuts will run about 50%, across the board.

And the revenue loss won't be made up to Truman's liking.

In all, the cuts will cost a billion-plus. The committee will resort to the Mills plan to offset most of this. (The Mills device would boost collections temporarily by speeding up corporation tax payments—page 140.)

Truman probably will veto the bill. That's freely predicted within the committee, but it isn't changing committee plans.

The Democrats say a veto would be "good politics." They figure this way: A veto would show that Truman is for a sound fiscal policy, thus answer an election year charge. And it wouldn't make excise cut advocates mad, either, because Congress will override Truman, making the cuts stick anyhow.

•

Congress likes to talk economy—and not vote it. That's now clear in the huge one-package appropriation bill.

A \$1-billion sliver off Truman's big \$42.5-billion budget is as far as the House committee went. It makes the earlier talk of a budget-balancing slash look like political fakery.

The House may vote a deeper cut when it acts on the bill in a week or so. But the prospect still is that when Congress gets all through, the actual savings will be small—not enough to force Truman to back up on his spending plans.

•

Defeat of Truman's NLRB reorganization now seems likely. Votes are being lined up to kill it on the grounds that abolishing Denham's office weakens Taft-Hartley.

The Maritime Commission will go to the Commerce Dept. There's opposition to it in Congress, but it's weak.

•

What happened this week on ECA is revealing. For it shows the inclination in Congress to control foreign spending and mix the aid programs with domestic politics.

The politics is in the House committee's decision to substitute \$1-billion of farm surplus for cash in ECA's \$2.9-billion third-year program. Actually, this would neither save money nor cut surpluses. It's merely a gesture to farmers.

But it would give the Commodity Credit Corp. a monopoly in farm

WASHINGTON OUTLOOK (Continued)

BUSINESS WEEK

WASHINGTON BUREAU

MARCH 25, 1950

exports, which Congress won't vote. Congress isn't in the mood for that much more government in business.

The control is in the string proposed for ECA's pocketbook.

The bill earmarks \$600-million for a European payments union. ECA money isn't denied nations discriminating against U.S. trade, but there's a hint that it might be later.

The changes, though mild, reflect a growing impatience with Europe's failure to reduce trade barriers and do more to help itself. Britain is the No. 1 target here.

Financial aid to small business: Truman's plan will be ready for Congress within two weeks. Details are being worked out at Key West and aides here expect Truman to back both easier loans, through RFC, and equity money, through a new banking system. Congress will O.K. at least part of it, but not until summer.

New England will get natural gas, probably by the end of 1951. The Federal Power Commission is expected to approve a pipeline project later this year, in time for construction next year.

This will be another blow to coal, which is losing steadily to gas and oil, as Lewis pushes coal prices up with wage raises and makes the supply uncertain with strikes.

Note the planting plans to farmers. They indicate another year of surplus-making crops.

Aggregate acreage for 17 big crops will be up from last year. Of the crops under voluntary acreage control, only wheat is likely to stay within the government-set limits. Farmers intend to overshoot on corn, potatoes, rice, peanuts, and dried beans—all of which are under price supports now.

With favorable weather, production will exceed demand. Thus the taxpayer will have to fork over more to keep farm prices from tumbling below the support levels.

A wheat lobby with a farm plan of its own is being set up. It wants to end price supports for wheat, but get benefits for farmers on the grain used for food. A processing tax would pay the costs. It sounds far-fetched, but the lobby is counting on opposition to price supports to play into its hands.

Fanny May has run out of money again. That's the Federal National Mortgage Assn., which pumps money into housing by buying GI and FHA insured mortgages from banks and other lenders.

The government is about \$2.5-billion deep in mortgages. That is the total of Fanny May mortgage purchases and commitments to buy. It amounts to direct lending by the government—although the loans are made by private lenders, and these lenders get a fee for servicing the mortgages after the government has bought them.

More mortgage buying will be O.K.'d by Congress. FNMA is a big prop under the housing boom, and Truman's policy is to expand housing credit, not shrink it.

Close-Up of America's No. 1 Furnace

No, this isn't a flood of volcanic lava, but red hot coke being thrust from a coke oven just before being rolled into a quenching tower where it will be cooled by air or by thousands of gallons of water.

You already know that coke provides the carbon that makes raw ore into iron. But you may be surprised to learn that at the same time these ovens are baking coke from bituminous coal, they're also distilling the chemical elements which go to make products like nylon, aspirin, perfume, sulfa drugs, synthetic rubber and almost 200,000 other things.

To provide coal of dependable quality, in volume and at reasonable cost, for coke ovens, railroads, electric power plants, factories, offices and homes, the bituminous coal industry has invested hundreds of millions of dollars in the past ten years. Some of it has paid for new mines and mining machinery. But a lot of this money has helped build huge mechanized coal preparation plants in which coal is washed, graded, blended and treated to meet the needs of different types of coal burning equipment. That's why industry and coal consumers are finding that this specially prepared coal is the most dependable and economical of fuels.



BITUMINOUS COAL

BITUMINOUS COAL INSTITUTE

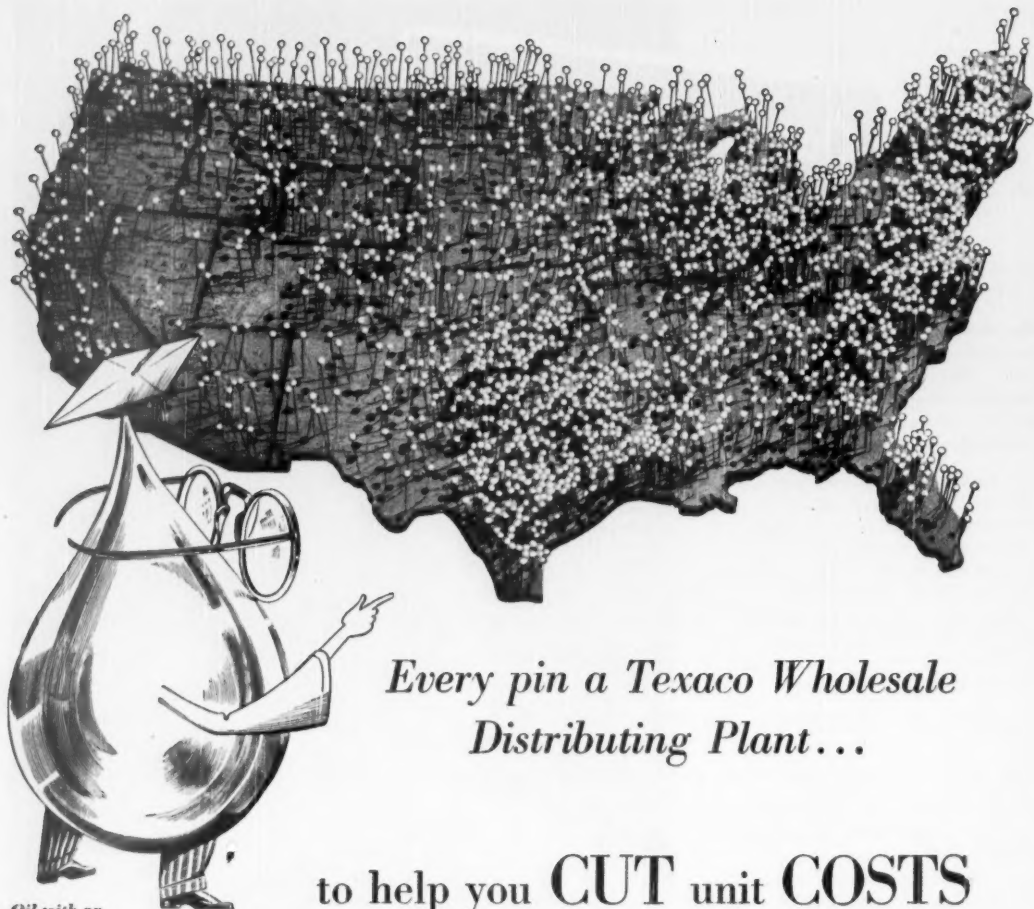
A DEPARTMENT OF NATIONAL COAL ASSOCIATION

WASHINGTON, D. C.

Modernizing America's bituminous coal mines has meant replacing "pick-and-shovel" mining with machines. Today more than 91% of production is mechanically cut and 60% is mechanically loaded. As a result the worker in a modern mine is less and less a "miner," more and more

a skilled machine operator. Largely as a result of this modernization, the American miner's average daily output is five times greater than that of the British miner—and the American miner's take-home pay is higher than that paid by any other major American industry.

BITUMINOUS COAL... LIGHTS THE WAY... FUELS THE FIRES... POWERS THE PROGRESS OF AMERICA



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Engineering Degree

*Every pin a Texaco Wholesale
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- U. S. industry everywhere is enjoying the benefits of Texaco high quality products . . . after recommendation by Texaco Lubrication Engineers.

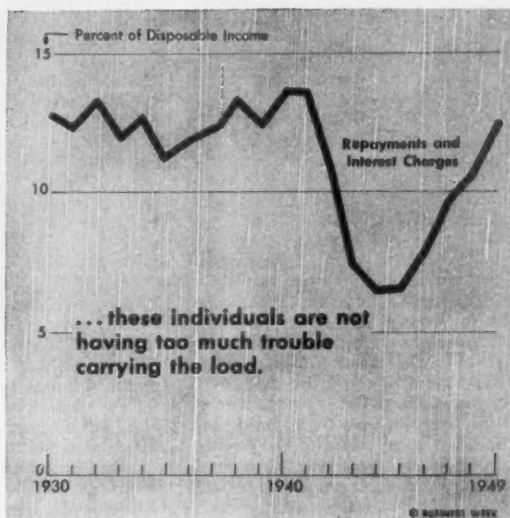
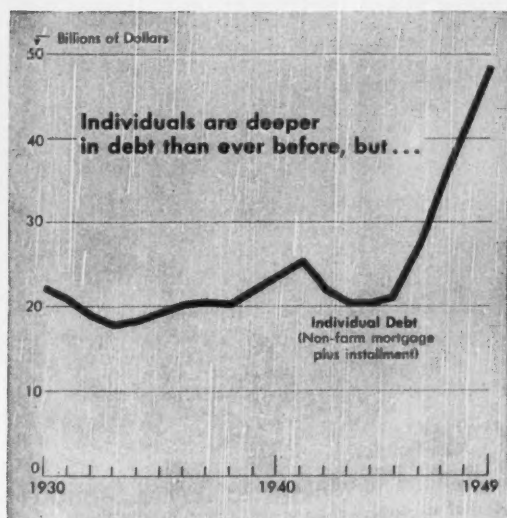
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More than 2000 Texaco Wholesale Distributing Plants in all 48 States—to serve all your plants.



Is the Country Swamped With Debt?

It's deep in hock but nothing like swamped. Low interest rates and high incomes are keeping the load comfortable.

Look at the left-hand chart. It shows that Americans have their names on more IOU's than ever before in history. Their homes are mortgaged to the roof, and there's hardly room on the doorstep for all the instalment collectors.

Individual debt has more than doubled since the war ended. It's about twice what it was at the end of the profligate twenties. This rush into debt has had a lot to do with the solid, unwavering thrust of purchasing power that stopped the recession of 1949 and keeps the present boom going (BW-Jan. 28 '50, p19).

To many businessmen, to some economists in the Federal Reserve and elsewhere, all this looks mighty ominous. You can't live on the cuff forever. Some day the sheriff will take over.

But...

Look at the right-hand chart. It tells a different story. U.S. consumers are far from staggering under their debt-load. Actually they are carrying it more comfortably than in any reasonably prosperous prewar year. Individuals can go a good deal deeper into hock before they have to pay out as large a share for interest and amortization charges as they did in 1940 and 1941.

The explanation is obvious. Despite taxes, the income available to service consumer debt is ever so much larger than it was in the thirties. At the same time it costs a lot less to service a dollar of debt: Interest rates are lower; and the 20-year and 25-year amortizing mortgages on homes which are standard today are far easier to deal with than the short-term mortgages common in the twenties and early thirties.

• **Corporations, Too**—Corporations are in an even more wonderful shape. Since the end of the war, corporate debt has risen nearly 50% to something between \$50-billion and \$55-billion. But that's been paced almost exactly by the growth in corporate earnings (before taxes) from which the debt is serviced—a rise from \$19.7-billion in 1945 to about \$28.6-billion last year.

As compared with 1929, the corporate debt load is fantastically light. The total debt is now about 20% higher than it was then; but it's supported by nearly three times the earnings and is carrying only about half the interest.

• **Farmers Rest Easy**—The farmer is in the best shape of all. Like everyone else, he finds his interest rates easier

and his income higher than in prewar years. But unlike anyone else, his total debt is actually lower. It was \$9.6-billion back in 1929. Some of that was washed out in the thirties, and more of it was paid off during the war; by 1945 it was down to \$4.7-billion. It's still only \$5.5-billion.

That's no burden at all. In the early thirties, nearly a quarter of farm income came to go for payments on mortgages. Today the figure is 4.7%.

• **Local Governments**—States and their sub-divisions spend money, too. In the past 21 years, their debt has been rising steadily, though more slowly than the federal debt. It is now about 50% above the \$13.2-billion of 1929. But with increased revenues and the drop in interest rates, local governments are actually in better shape than ever.

• **The Big Debt**—If you add in the federal debt to private and local government obligations, you get a staggering total of \$635-billion—and it's still growing. But that's a deceptive figure when you are trying to gauge business prospects; it's inflated by the 16-fold increase in the federal debt since 1929.

Whatever the political implications and the inflation dangers of a high federal debt, few economists today could imagine any situation in which the federal government would have to cripple business by stopping its spending just

because it had exhausted its credit. The banking system is too much under the government's thumb for that to happen.

Moreover, the expansion of federal credit coincided with a vast increase in productive capacity and national income.

Anyway, the Treasury has been able to finance at low rates of interest; carrying charges this year will take only 2.2% of the national income; in 1946, the cut was 2.9%.

• **No Moose—Yet**—What does it all add up to? Are we riding for a fall on a debt-paved highway?

It doesn't look that way. There's no doubt that the year-by-year increase in debt has added a filip to the postwar boom, a filip which might become of less importance if the increase started to level off.

But the real debt burden is still too light to threaten any drastic leveling. And there is nothing particularly artificial or sinister about the increase so far. A little of it was a one-shot affair of recovering from the low private debt of wartime. But mostly the increase in debt has simply reflected the growth in the economy—a real increase balancing the real growth in productive power, and a paper increase reflecting the paper growth of inflation.

Of course, if the economic trapdoor opened under us, today's high debt could be the noose to hang us. But that's just one more illustration of the extent to which the country has committed itself to a high and rising national income (BW—Mar. 4 '50, p19).

RISE IN THE "608" MARKET

The Mar. 1 cut-off date for applications for Federal Housing Administration commitments under Section 608 (page 40) has stimulated the resale market for these pieces of paper.

FHA commitments always have had a cash value. (Says one New York builder: "They represent a hell of a lot of work.") And a certain amount of trading in them has always gone on. Builders who had commitments, and found they couldn't go ahead with a project, were quick to sell them.

But this week in Washington, housing officials suspect that many builders who put in applications under Section 608 during the last three months rush had no intention of building the apartments they described in their proposals. Intended only to sell the commitments to would-be builders who had missed the deadline.

Builders and local FHA officers are a little skeptical of this feeling. They deny there have been any large-scale promotion deals. But they admit that builders who have commitments are a little inclined to ask more for them than they used to.

Vote for Rails

Westinghouse Electric will favor railroads against truckers for long-distance hauls. Move could force carrier issue.

Westinghouse Electric Corp. took a high dive into the truck-railroad scrap this week. With a splash of ballyhoo, it came out with the statement that the railroads are the shippers for it.

Spokesman for the "support the railroads" policy was Andrew H. Phelps, Westinghouse vice-president. He unveiled the new policy to a receptive audience, the Western Railway Club, in Chicago. The effect of the dramatic play may be to push the whole problem of carrier competition to the fore.

Phelps told the railroaders that Westinghouse is going to do all its long-distance shipping by rail, unless trucks offer big advantages in service or rates. When a trucker offers lower rates, the company will give the railroads a chance to make "adjustments" so that they can still get the business.

• **Reasons**—Westinghouse put its arguments on high ground—the plight the country would be in if the rails should have to go under. But there are other obvious reasons for its stand. Westing-

house is a big builder of railroad equipment. It owns about one-fifth of Baldwin Locomotive's common stock.

In stepping into the ring in the railroads' corner, Westinghouse took a calculated risk. It has spent two years in evolving its policy. It figured it had more to gain in the way of business from the railroads and railroad parts manufacturers than it had to lose from truckers. And Westinghouse was careful to exclude local truck services.

There's a chance, of course, that the truckers might try to retaliate through a boycott. If they did, Westinghouse appliances might suffer.

• **Tax Props**—Officials made no claim that they were shooting for positive action to save the rails. But there's a hint of this in Phelps' speech. He called the operations of the roads' competitors "transportation by taxation." Air and water carriers have their subsidies; truckers have their "roadbeds" built out of taxes, he argued. The rails have to pay for every mile of their lines, plus equipment and operating costs.

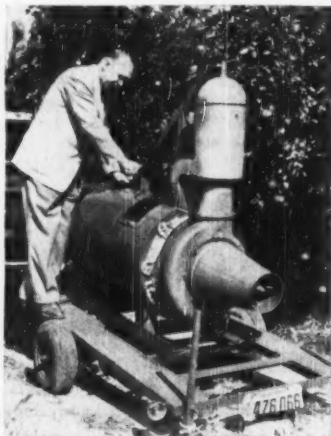
Want to Buy a Station? See New Haven R.R.

You can buy any passenger station you want along the New Haven R.R.'s system as of now. All you have to do—besides pay for the property—is promise to put up a modern depot, for the road's passengers. There are only a couple of exceptions: You can't buy the New York Grand Central Terminal or Boston's South Station. The New Haven doesn't own these.

• **Advantages**—Putting passenger stations on the block is a pretty unusual thing for a railroad. The New Haven figures it's good business, though. Sales will bring it some money it can use; the road won't have to pay the heavy land taxes; and the new stations will give the customers better service.

The New Haven has already had some takers—in Needham, Hingham, and Cohasset, Mass., and in Mount Vernon, N. Y. At least two other deals are on the fire: one in Quincy, Mass., and another in New Rochelle, N. Y.

• **Shopping Center**—The Mount Vernon deal is a good example of what the road hopes will come out of the sales. The buyer was Schein-Cohen Construction Corp. of White Plains, N. Y. Schein-Cohen paid some \$500,000 for the station and 108,000 sq. ft. of adjacent property. It will put up a \$1.5-million shopping center, with the passenger facilities as the center of the center. There'll be room for 35 shops, a department store, a movie theater, and parking space on the roof for 300 cars.



Jets in the Orchard

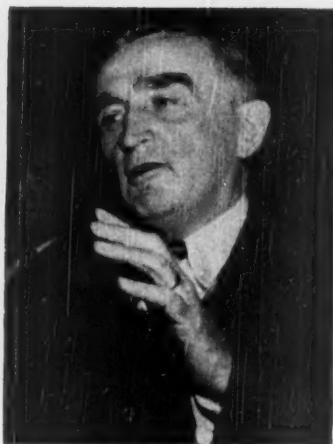
A California inventor, Edward West, Jr., is trying to make turbojets standard equipment in the orange groves. West says one of his jet heaters will replace 500 smudge pots at a cost of only \$2 an hour for diesel fuel. The battery of smudge burners, West figures, cost \$35 to \$50 an hour to run. The turbojet is supposed to heat 10 acres, but West doesn't say how a grower with one unit decides which way to point it.



SEN. LUCAS SAYS: FHA-type loan guarantees, with RFC the boss.



SECRETARY SAWYER SAYS: Loan insurance, with Commerce Dept. the boss.



SEN. O'MAHONEY SAYS: Capital banks, privately financed, to provide equity capital.

Whose Kind of Help Will Small Business Get?

Fair Deal aches to cure small businessman's ills. There are three main plans. Loan insurance is a sure-fire feature.

The small businessman is getting the rush of his life. Truman & Co. can't do enough for him. It's a part of the Administration strategy of "something for everybody."

The question is what the "something" for small business should be. Half a dozen plans kicking around Washington have half a dozen different answers. But on one point the planners do agree: Any congressional action should provide small business with some type of equity financing and more liberal loan guarantees.

I. Choice of Three

Two such bills already are before Congress:

The Lucas bill, providing for FHA-type loan guarantees, to be administered by the Reconstruction Finance Corp.

The O'Mahoney bill, setting up capital banks to provide equity capital (BW—Feb. 11 '50, p. 24). Big feature of this is that it calls for private financing.

Still a third plan is under the Administration's eye—the Bimson plan, providing for loan insurance. Author is W. R. Bimson, president, Valley National Bank, of Phoenix, Ariz., and a member of the Commerce Dept.'s Small Business Advisory Committee.

This is the one Secretary of Commerce Sawyer is plugging—and he would like the Commerce Dept. to administer it. The Council of Economic Advisers favors capital banks,

though it would add loan insurance as a feature.

Despite the haggling, the White House hopes to work out a compromise that it can send up to Congress shortly as a single package. Although it never endorsed the O'Mahoney bill, the Administration would probably incorporate some of its features.

II. Loan-Guarantee Plan

The package is sure to include one thing. That's a loan-guarantee plan worked out by a group headed by John Steelman, the President's official adviser. All the squabbling agencies were represented: Commerce, Treasury, RFC, the White House staff, and the Council of Economic Advisers.

The plan goes along with the Bimson proposal in this: It would more or less follow the FHA financing pattern. Like the FHA formula for insuring Title I loans, it is supposed to cost the taxpayer nothing; interest charges will take care of the cost. But RFC, rather than the Commerce Dept., is the most likely candidate to supervise the loan-guarantee plan.

It would follow these lines:

All banks would be allowed to make loans up to \$10,000 for each small business borrower. Maximum maturity would be 10 years. Over-all limit in the amount of outstanding loans will probably be set at \$1-billion.

The interest rate would be 5%. Actually, this would include an insur-

ance premium of 1½% to cover losses and expenses, so the interest rate would come down to 3½%.

• **Reserve Fund**—Congress would be asked to set up a \$500-million reserve fund as a protection against losses during the early stages of the loan operation. This fund would revert to the Treasury as soon as enough premiums had been collected to cover losses.

To make sure a smaller bank has enough lending capacity for its own community, the supervisory agency can buy these loans if the bank so demands.

• **No Preview Review**—Each bank would be its own boss on what loans it makes—so long as the borrower meets the requirements for credit worthiness. The only time the supervisory agency would review a loan would be when a bank claims payment from the insurance fund to recover a loss.

The agencies still don't see eye to eye on all the provisions of this plan. One trouble spot is the 14% insurance premium. Commerce argues that it isn't too steep. The Council of Economic Advisers says 1% is enough, that the banks ought to have a full 4% rate as incentive.

Then the touchy question of the supervisory agency is still unsettled.

Another question: Should the over-all limit on outstanding loans stand at \$1-billion or \$2-billion? And should the reserve fund be fixed at \$500-million?

• **Who's Worthy?**—Toughest question is what makes a borrower "credit worthy"? This is the only part of the plan that has been kept secret. And it's the crux of the problem. For to cure what ails small business, loans will have to be easier to get than they are now.



1 Still top dog among loggers is man who first climbs tree, cuts off branches on the way up, then tops the crown.



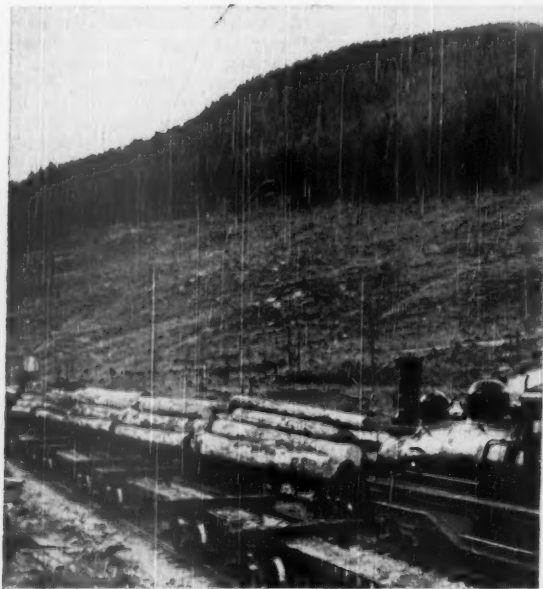
2 Then portable machines take over. This chain power-saw sliced through this giant Douglas fir in just 15 min. Logging is still highly dangerous, but safety gadgets are catching on. Helmets protect against "widow makers," or falling branches.

Lumber Is Booming... But Where Are the Logs?

The biggest winter and spring ever—that's the way Oregon and Washington lumbermen see it.

In the last three weeks lumber production has shot up sharply. But even so, mills are eating into inventory, shipping 20% more lumber than they cut.

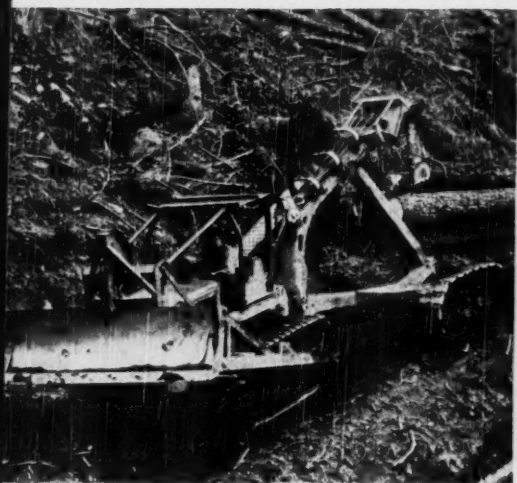
This week some mills were refusing new orders for lumber. They want to



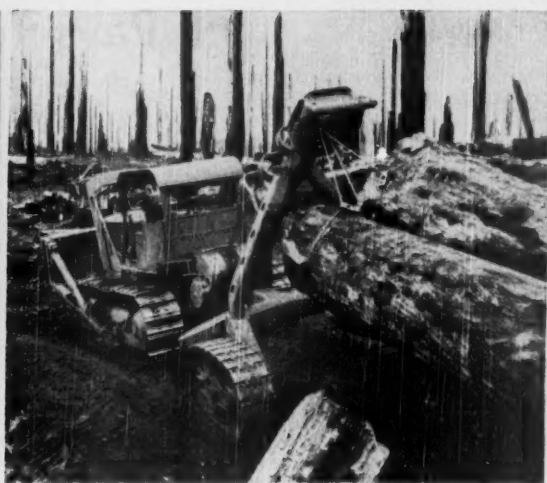
5 The logging railroad's day is mostly over, but some operators with big holdings still haul by rail. Often the railroad taps a general logging area, with trucks feeding the rail line.



6 Most hauling is now by truck. Here a cable hoist runs from tractor up to spar tree and down again. It lifts log easily using cable slings at each end. This one log makes a load.



The diesel tractor has replaced the old steam donkey engine as the logging work horse. It cuts its own skid road with bulldozer blade, uses its own power winch to snake single logs up close.



4 The tractor hauls three or four logs at once to loading point. Cable runs from log butts to winch on tractor. Logging arch, riding on crawler treads, lifts the log butts off ground.

see what the present hot demand will do to log prices.

There is no question about what this demand will do to the timber-cutting business. A super-duper year is ahead, not only for the big logging operators like Weyerhaeuser Timber Co. and Simpson Logging Co., but for the little gyppos, too.

Timber cutting today is built around

the simple fact that good trees are numbered. Stands often are small and widely scattered. Even where the trees are thick, sustained-yield logging prevents the wholesale mowing down of forests that was basic to timber operations early in the century.

These facts lie back of the changed nature of logging operations. No longer can a big operator, even a

Weyerhaeuser, afford to build his own private rail line into a timber area. Some old logging railroads still operate, but new stands are tapped with truck and diesel tractor.

Donkey engines still snake logs out of the forest and run cable hoists. But the steam donkey is dead; today the engines are diesels. And many operators skip such stationary power entirely. A



7 Too big for public highways, these oversize trucks can haul several rail carloads at a crack along private roads between logging area and saw mill or rail loading point. Empty truck above waits at

siding for loaded truck to pass. These giants are Seattle-built Kenworths, 275 hp., 15 forward speeds. On return trips logging trucks don't pull their long trailers; they carry them.

winch on a crawler tractor does the same job (picture No. 6).

Since the war, with the gradual depletion of Washington forests, the center of gravity of the industry has shifted south from Washington to Oregon. In both states there are still big trees to cut, but tree-waste is a thing of the past.

This explains the present position of the small operator, the gyppo. The big companies are not geared for cleanup work, they can't efficiently go back after small bypassed timber stands. The gypsos do this job. They also comb over old burns, picking up usable logs that survived forest fires.

The weatherman had a finger in this year's log shortage. Snows in the Cascade and Olympic mountains were the heaviest since 1916. Logging operations literally were snowed under. Lumber mills sold from inventory; so did lumber dealers. Meanwhile, mild early-winter weather in the East and Middle West where builders were using the lumber kept demand strong. This speeded up the inventory clean-out and tied a kite to prices. Douglas fir is now \$53-\$55 per Mbf., up \$10 from a year ago.

As long as the housing boom continues (page 36), the lumber outlook should be good. But once demand slackens off, West Coast lumbermen think they smell trouble. It may not come for two or three years, but these lumbermen think now is the time to get ready.

Their worry is future price competition from Canada. Lumbermen in Oregon and Washington and lumbermen in British Columbia cut the same sort of trees in the same sort of mills and sell in the same market—the U.S. and the world. But Canadian costs are lower. When demand does slacken, British Columbia production, though only a quarter of Washington-Oregon production, could break the U.S. market.

Here is what gives British Columbia mills an advantage:

Wages: The base rate in Washington-Oregon is \$1.45; in British Columbia, \$1.074.

Transportation: British Columbia mills can ship to the eastern U.S. in foreign bottoms, saving \$4 to \$8 per Mbf. over charges on the U.S. ships required in U.S. intercoastal trade. U.S. ships also must collect the 3% U.S. transportation tax.

Devaluation: Canadian devaluation last fall increased by 10% the profit margin of British Columbia mills selling in the U.S.

These three advantages add up to about \$11.60 per Mbf. lower cost for Canadian mills, the West Coast Lumbermen's Assn. estimates. Against this is only the present U.S. tariff of \$1.

It Pays To Be an Insider

Hawaiian and Alaskan businessmen expect a better shake once they're inside the Union as full-fledged states. Alaska expects better transportation, more people, lower prices, more business.

To businessmen in the territories of Alaska and Hawaii, their admission to the Union as states would be the greatest thing since the invention of the dog sled and the pineapple. Right now both areas are highly excited about the prospect—Alaskans even more than Hawaiians. The House has already approved legislation, and chances are almost even that the Senate will pass any bill the insular affairs committee turns out at this session.

• **Two Obstacles**—Only two big obstacles stand in the way of statehood. The first is time; legislation might get sidetracked in the crush of more important things. Second, someone might inject the Communist or racial issues to scare everybody away from passage. (The second is unlikely; the sponsors of the bills in the House skillfully jockeyed around these issues.)

• **Discrimination**—Businessmen in both Alaska and Hawaii have keenly felt the disadvantages of their territorial status. Constantly they have had to swallow

Congress's discrimination against them. There were things like the Merchant Marine act of 1920, which prohibited lower freight rates to Alaska, and the Sugar Act of 1934, which classified Hawaii as a foreign territory—and prescribed the amount of refined sugar it could ship to the U.S.

Statehood would end such discriminations.

• **Alaska**—Biggest gainer through statehood would be Alaska. To be sure, Hawaii has always gotten "the short end of the stick" from Washington when it came to federal grants of aid for roads, schools, hospitals, low-cost housing, and so on. But to Alaska, even that looks like a lot—it gets nothing but splinters.

Alaska is such a "have-not" land in comparison to Hawaii, in fact, that it will even welcome the higher taxes statehood will mean. It can use the money to improve its own standard of living and public conveniences.

• **Taxes Now**—Present sources of territorial revenue include a tax on the salmon-fishing industry, professional and occupational licenses, corporation fees, an insurance premium tax, and several others. Statehood will undoubtedly bring a search for another \$4-million in tax revenue. Best bet is that the new state government will float bond issues to help build hospitals, roads, schools, etc. All these things, of course, will affect businessmen.

• **Population**—The core of the drive for statehood has been Alaska's need to boost population. There are now 100,000 people in Alaska, one-third of whom are Indians and Eskimos. But there's nothing to encourage further immigration. The cost of living is extremely high—partly because of almost prohibitive distribution costs. And these come from transportation difficulties. Alaska has only 5,000 miles of roads, most of them in a state of disrepair. Except in national forests, the territory gets no federal highway aid. Alaskans figure that more and better roads will mean lower costs of food and materials, bring more settlers from the States.

Under statehood, Alaskan businessmen will plug harder than ever for higher population. They take the view that more people will mean lower prices, because it will be possible to get lower freight rates. There is already talk of forming cooperative storage facilities to handle carload or full-carload shipments. Merchants and distributors feel that storage facilities will give them a chance to lower prices, will let them



Undersea Tanker

In its emphasis on submarine warfare, the Navy has come up with a new twist: an undersea oil tanker. The extra bulge on the side of the rebuilt U.S.S. Guavina is one of its two new cargo tanks. Although the submarine can hardly carry as much oil as a surface vessel, its cargo might come in handy in a pinch.

take advantage of lower marketing prices during harvest periods in other states.

• **Hawaii**—In Hawaii, businessmen are also heavily in favor of statehood. They don't expect their cash registers to start jingling so loud they can't hear customers' orders as soon as the new star appears in the flag. But they do see long-run advantages that may be more valuable than anyone can estimate now.

For instance, islanders (solidly Republican by long tradition) doubt that Washington would have allowed the 1949 dock strike to run six months without intervening if Hawaii had had four voting members in Congress. They doubt, too, that they would be without local offices of the Reconstruction Finance Corp. and other federal agencies. Businessmen are sure that they could get a more sympathetic hearing on problems such as transportation and agriculture, the two pillars of the Hawaiian economic system.

In direct dollar return, the most visible results might be in increased public-works aid to the territory. A long-sought reclamation program might go through. And the islands would find themselves automatically included in all appropriations made to all the states.

• **Insults**—Businessmen would rest a lot easier, too. They still remember bitterly the 1934 sugar act, which knocked 100,000 tons a year off their quota. That move cost Hawaii an estimated \$50-million over the next 10 years. Hawaii figures the wording of a lower court decision upholding the act is insulting: "Under the territorial power of the Constitution . . . Congress may discriminate commercially against the territory of Hawaii as a whole, even though it is an organized territory."

• **More Business**—Businessmen feel further that the stature of statehood would encourage mainland businesses to take an interest in Hawaii, give it equal treatment with the states. Now, for example, many publishing houses count Hawaii in their export area. They pay shipping to San Francisco, but island dealers have to pay it beyond. That means an extra cost on each book.

But being in an export area sometimes has advantages. Auto dealers liked it after the war, because the export areas could get cars easier than areas under domestic quotas.

• **Improvements**—In Washington last week, a practical businessman from Alaska summed it up this way: "When I come to Washington I will be able to see two senators and one congressman, as well as their secretaries and staff members—a total of perhaps some 30 people to help me. As a citizen of a territory, I have only one delegate and his staff of three people. You have the advantage of 30 directions of pressure and influence—and in Washington, brother, that's what counts!"

Cold Pills Hit

In complaint against two drug companies, FTC challenges about every ad claim made for the antihistamines.

Ever since full-page ads for antihistamine cold tablets came out last fall (BW—Nov. 19 '49, p20), drug men have been awaiting the reaction of the Federal Trade Commission.

This week FTC reacted—violently.

• **Bill of Particulars**—In a complaint against Bristol-Myers' Resistabs and Anahist Co.'s Anahist, the commission challenged just about every claim made for the new wonder pills. It said: The products won't protect against invasion by the common cold; won't prevent sneezes and sniffles from becoming more severe, nor cure them; won't contribute to the body's defenses against the cold virus.

• **Tacit Charge**—More important than the verbal tanning, however, is FTC's tacit charge that the Food & Drug Administration erred last fall when it cleared antihistamines as safe for over-the-counter sale. Up to that time, the drugs could be sold only by prescription for use under a doctor's care. Food & Drug can't vouch for the efficacy of a new drug. But it does have to O.K. it as nonharmful before it can be sold to the general public. (Food & Drug is reported privately to be sorry it didn't take a little more time before giving antihistamines the clearance that brought on all the excitement.)

FTC's complaint says flatly that the antihistamines "may be unsafe and produce injury or harm to the user" even when used as directed. The commission claims that:

• A few people may get sick from taking the pills. Therefore, sellers should not advertise that they are "absolutely safe."

• Some users get "side reactions" such as drowsiness. This may make it dangerous for them to drive a car or operate machinery.

FTC labels the antihistamine advertising as "unfair and deceptive" and therefore in violation of the Federal Trade Commission Act.

• **Defense**—The drug houses, of course, are ready to fight back. Mainly, they're relying on last fall's Food & Drug blessing which enabled them to put their products on the market. And they are proceeding with business as usual.

Of course, the manufacturers are plenty sore about the unfavorable publicity FTC is handing them. But they say they're not worried about what the FTC complaint will do to sales of the antihistamines. They reason that the

public has used the drugs with "safety and effectiveness" and will go on using them. What's more, the drug makers don't plan any immediate changes in their advertising copy.

Besides, said one manufacturer, the big cold season is just about over. If sales slump from now on, we'll blame the seasonality of colds rather than FTC.

In addition to the complaint against Bristol-Myers and Anahist, FTC says it has other manufacturers "under scrutiny."

BUSINESS BRIEFS

• **Seattle voters** surprisingly killed a plan to build 1,221 low-rent, public-housing units under the federal program. The state's long public-power record had made government housing seem a sure thing.

• **Aircoach DC-6s** will fly coast to coast for the first time when American Airlines resumes its transcontinental coach service on Apr. 4. American had been using DC-4s before it suspended the flights during its strike.

• **Hawaiian sugar growers** look for a bumper yield in 1951 out of last year's record plantings (cane is a two-year crop in Hawaii). Planters have a 1,052,000-ton quota under the sugar act.

• **Schenley** brought back eight-year-old, bottled-in-bond bourbon and rye to sell for \$7.11 a fifth in New York.

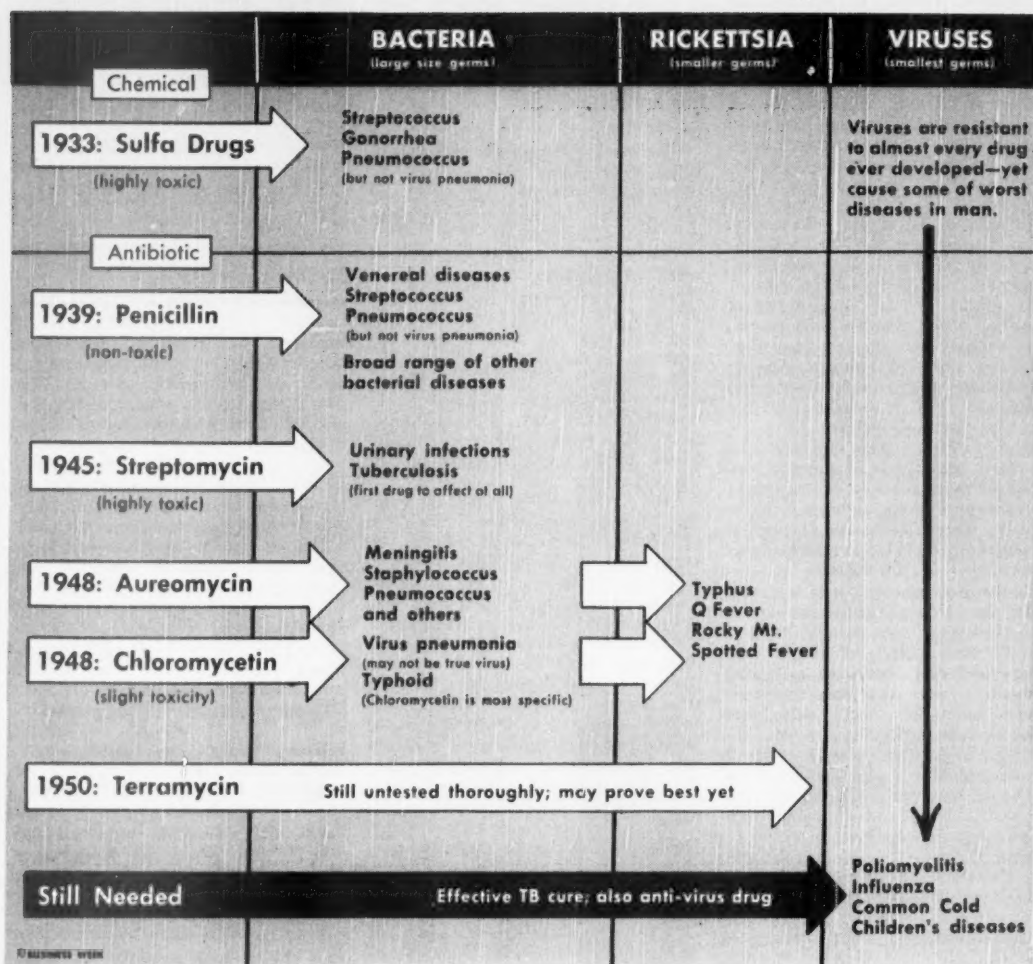
• **Texas oil allowables** were boosted 130,376 bbl. a day for April, after four straight months of production cuts. Reason: the warm-weather motor-ing months ahead.

• **Sun Oil ads** in local papers last week started telling customers: "Sunoco Dynafuel now sold . . . in this community will hereafter contain a small amount of tetraethyl lead." The ads jumped the gun on a national announcement that Sun would bring out its first leaded gasoline—reportedly at 92 octane and standard-gas price.

• **Sears, Roebuck's sales** skidded 5.5% last year, brought profits down from \$137.2-million in 1948 to \$108.2-million. Sales since December, though, have topped year-ago marks.

• **Lustron's operating costs** have been pared \$300,000 a month without cutting output, says receiver Clyde M. Foraker. Talk now is that a grand jury will investigate to see if the Strandlund management conspired to defraud the government.

MEDICINE



NEW DRUGS:

Health for Patients, Gamble for Makers

If you want to lose your shirt in a hurry, start making penicillin and streptomycin.

That was the word that came last week from one of the nation's top drug executives. He is John E. McKeen, president of Chas. Pfizer & Co., the world's biggest producer of penicillin. He issued his warning to the New York Society of Security Analysts.

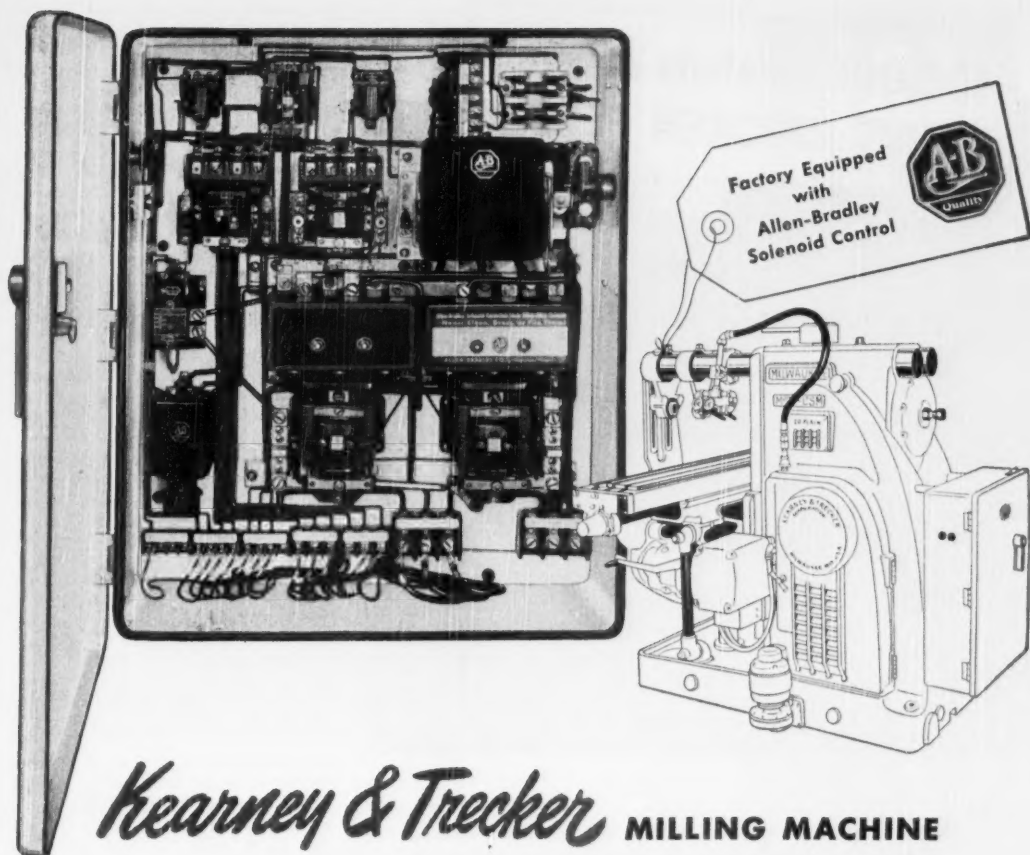
• **Prices Plummet**—None of this was news to the \$715-million ethical drug industry. Production of both these drugs is so high that the price drop has been phenomenal. Only seven

years ago, 100,000 units of penicillin sold at a bulk price of about \$20, today at 4½¢ at the manufacturing level.

"In an industry where a change in the type of mold used," McKeen said, "can easily increase production from 20% to 50% almost overnight, it is difficult to say where prices might go." Already production in streptomycin and dihydrostreptomycin—an improvement on the original product—is from 200% to 300% above domestic demands. Plants now going up in foreign countries will cut the U.S. export market by 40% or 50% by next year.

Business situations account for these tremendous changes. First of all, there are no patents on the basic form of penicillin; those on streptomycin are held by scientists who issue licenses to produce it. So almost anybody can make them. Next, penicillin mass production is chiefly a war baby. U.S. industrial ingenuity found a way to turn it out in huge quantities in an extremely short time.

Today this ingenuity has kicked back on the 13 companies now producing penicillin. It has made competition among them so keen that none will



Kearney & Trecker MILLING MACHINE

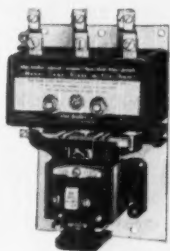
Operated by 11-Unit Allen-Bradley Control Panel

This well known milling machine is factory equipped with a compact, Allen-Bradley sequence control panel.

The Allen-Bradley solenoid contactors . . . with their patented silver alloy, double break contacts . . . give long, trouble free performance in the severest, high production service. Dependable Allen-Bradley thermal overload relays protect the motors reliably against abusive overloads.

It will pay you to investigate Allen-Bradley controls. They are a recognized sales asset to any motor driven machine.

Allen-Bradley Co.
1332 S. Second St., Milwaukee 4, Wis.



Only one moving part. No other contactors are so simple or so trouble free.

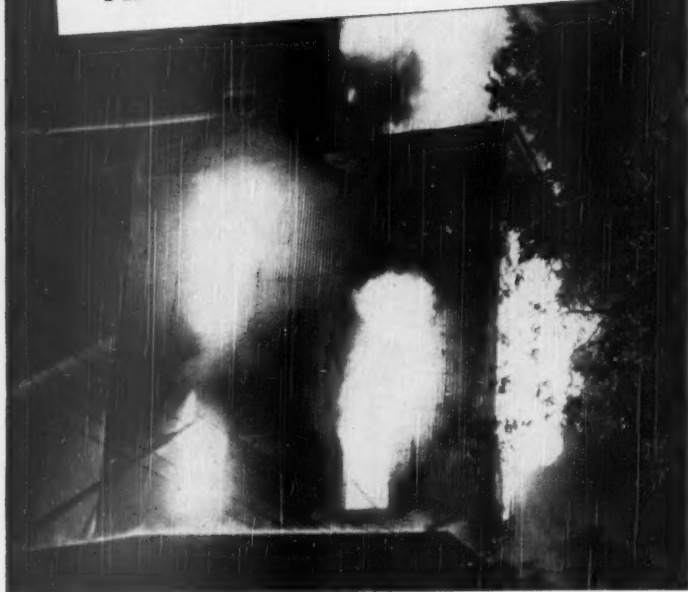


ALLEN-BRADLEY

SOLENOID MOTOR CONTROL

QUALITY

400,000 bushels of grain AIN'T CHICKEN FEED!



SStore hundreds of thousands of bushels of grain in an elevator. Turn on a blast of hot air to dry it...and you have a tinder box that can burst into white-hot flames in a matter of seconds. Fire records show that this *does* happen—frequently.

But they're ready for *that* at the National Oats Company's new 400,000-bushel grain elevator at East St. Louis. A Kidde automatic fire detecting and extinguishing system guards it 24 hours a day. If sudden heat signals "fire" the Kidde system goes into instant operation...pouring streams of flame-smothering carbon dioxide from multijet nozzles...killing the most deep-seated fire quickly and surely. After the CO₂ does its job...being dry, clean and chemically inert...it evaporates completely, leaves no mess...no damage to the grain.

Do you have a hazard that calls for fast fire detection—and speedy, harmless extinguishing? Call Kidde for the answer.

Walter Kidde & Company, Inc., 326 Main Street, Belleville 9, N. J.
In Canada: Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.



Kidde

talk publicly about how much of any antibiotic he produces, or how much money he is making from it. It is a poker game in which each player refuses to tip his hand, hoping he can bluff his competitors into quitting.

• **Everybody Sticks**—The trouble is—from a competitive point of view—that nobody does go out of business. And that's partly because nobody knows what's going to happen tomorrow. A company which is struggling along now in penicillin may come up next week with a better method of administering it, or a new way of making it.

For example: Bristol Laboratories, a subsidiary of Bristol-Myers Co., is the only producer which has found a way to make penicillin chewing gum. Until somebody else discovers the secret, Bristol will be riding high, profit-wise.

• **Biggest Reason**—But there is a bigger reason for everyone wanting to hang on. That is the hope that the scores of researchers working in every company's laboratory can come up with an antibiotic it can patent as its own.

So far, three companies have been lucky enough to find such antibiotics. Lederle Laboratories, a division of American Cyanamid Co., found a substance it calls Aurcomycin, put it on the market about a year ago. At about the same time, Parke, Davis & Co. put out a similar product, which it called Chloromycetin. And early this year, Pfizer announced that it also had found one of its own—Terramycin, distribution of which started this week.

• **The Lineup**—Nobody knows for sure just where each company stands in antibiotic production. The best guess on the first six runs like this: Pfizer is the leader in penicillin production, probably runs second in streptomycin. Merck & Co. of Rahway, N. J., is first in streptomycin, second in penicillin. Next in both comes Ely Lilly & Co. of Indianapolis; Commercial Solvents Corp., Terre Haute, Ind., and Bristol Laboratories, Syracuse, N. Y. (both penicillin makers only); and finally Schenley Laboratories, Inc., a subsidiary of Schenley Industries, Inc.

From there on, the order is anybody's guess. The other makers of both are: Abbot Laboratories, Chicago; Heyden Chemical Corp., Princeton, N. J.; E. R. Squibb & Sons, New Brunswick, N. J.; The Upjohn Co., Kalamazoo, Mich. Those that make only penicillin: J. T. Baker Chemical Co., subsidiary of Vick Chemical Co., Phillipsburg, N. J.; Cutter Laboratories, Berkeley, Calif.; and Wyeth, Inc., Philadelphia.

Parke, Davis & Co., and Lederle Laboratories have both quit making penicillin to devote full capacity to their specialties, Chloromycetin and Aurcomycin. (Incidentally, Chloromy-

Ask Your Steel Distributor for
J&L "E" STEEL
 the NEW fast-cutting bessemer screw stock

**J&L
STEEL**



Hundreds of machine shops report . . . Longer Tool Life . . . Better Finish . . . Faster Operation—when they use J&L "E" Steel, the amazing new bessemer screw stock for fittings . . . nuts . . . bolts . . . shafts . . . rollers and similar products.

J&L "E" Steel is available in standard shapes and in three grades: E-15, E-23 and E-33, each within the composition limits of standard bessemer screw steels with similar tensile properties.

Your steel distributor will be glad to deliver J&L "E" Steel. He knows that once you start using this free-cutting steel, you'll want more.

Users have obtained machinability ratings as high as 170 with J&L "E" Steel!

Your Steel Distributor is Your STEEL SERVICE CENTER for

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—HIGH QUALITY COLD FINISHED STEEL

Write us for the name of the nearest steel distributor of J&L "E" and other J&L cold finished steels . . . Also let us send you our new booklet: "Faster Machining . . . Smoother Finish . . . Longer Tool Life."

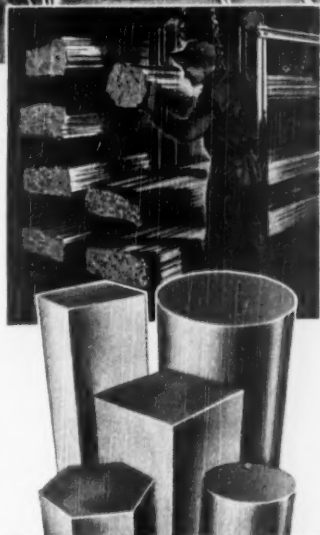
Any part machined from bessemer steel can be made better from "E" Steel.

"E" Steel (U. S. Pat. No. 2,484,231) is easily identified by the distinctive blue color on the end of every bar.

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- Jones & Laughlin Steel Corporation
- 434 Jones & Laughlin Building
- Pittsburgh 30, Pa.
- ☐ Please send me the name of the nearest J&L "E" Steel distributor.
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Get Utmost Beauty, Utility, Economy

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Brand Plastics!



Johnny's not the only one who goes for those bright-colored, long-lasting handlebar grips. They helped some smart store keeper sell the bike to Johnny's dad.

Scores of manufacturers know that VINYLITE Brand Plastic molded and extruded parts help their products sell faster, more easily. Hungerford Plastics Corp., Murray Hill, N. J., makes the "Flex-Grips," as well as the colorful, chemical-defying atomizer bulbs. They also make tough, flexible dog leashes and collars. Add scores of other makers of vacuum cleaner parts, distributor cap nipples, work gloves, sink strainers, what have you! They tell the same story of the economy, resistance to water, oils, alkalis, most strong acids of VINYLITE Plastics . . . of their range of colors, their age resistance, and electrical properties. If you are designing or redesigning a product, why not let plastics experts of Bakelite Division, Union Carbide and Carbon Corporation help you.

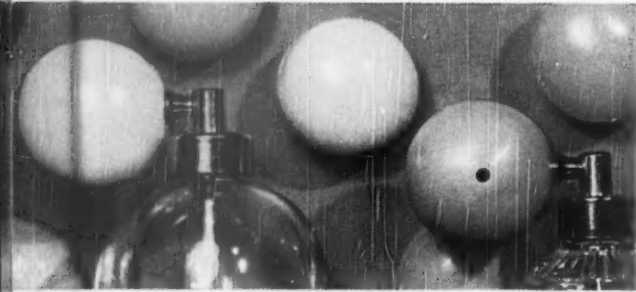
Write Dept. HN-62.

Visit the National Plastic Exposition,
Navy Pier, Chicago, March 28-31



BAKELITE DIVISION

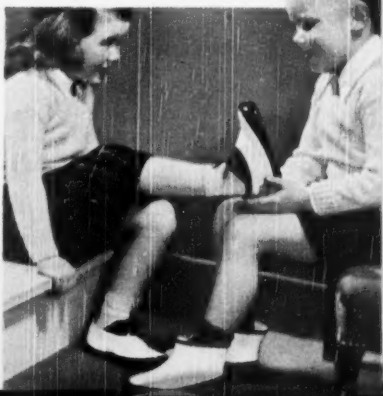
Union Carbide and Carbon Corporation, 30 E. 42nd St., New York 17, N.Y.



Faithful Reproduction - in quantity and less than usual costs. That's news in the field of color transparencies. These are now processed on VINYLITE Rigid Sheets giving an apparent three-dimensional depth plus eye-catching point-of-sale display. "Plastikolor Pix" by Wm. McIlash Harris, 52 Vanderbilt Ave., New York, N. Y.

Durable, multi-color-printed, and low in cost, these beautiful calendar cards for business promotion stay flat despite weather and temperature changes. A credit to your company, they are made of moisture- and chemical-resistant, dimensionally stable VINYLITE Rigid Sheets by The Emehol Co., Inc., 1239 Central Avenue, Hillside, N. J.

Sales Appeal. Mothers and the youngsters, too, like these, easy wear-resistant, wet-weather Paddlers® and storm boots. Easy to put on and take off, they're made by dipping from VINYLITE Resin dispersions. *Reg. T-M Plasti Industries, Inc., 400 West 3rd St., Wixoma, Minn.



cetin is the only antibiotic which is being produced synthetically).

I. A New Era

It was only 15 years ago that man first began to gain real ground in his war against infectious disease. Since then he has swept through them the same way that Patton's army swept across France.

The first compounds to be labeled "wonder drugs" came on the market in the middle 1930's. They were not antibiotics, but a group called the sulfanomides, a German discovery.

The trouble was the first compounds, especially, showed toxic side effects. Since then refinement and the development of some 3,000 new sulfa compounds have cut down the toxicity to a great extent.

• **Different Source**—Oddly enough, the antibiotics came from an entirely different source from the sulfas. Sulfas are man-made chemicals whose base is the traditional coal, air, and water; antibiotics are chemical substances made by bacteria. Here's how this works:

Each ounce of soil is full of millions of microbes which live in a highly competitive society. A deadly chemical warfare goes on ceaselessly between the various groups of microbes. To keep from being destroyed itself, each group of microbes manufactures a chemical which poisons another group.

• **Discouragement**—These chemicals are the antibiotics. Science has known of their existence for decades. But work with first ones found was discouraging: The antibiotics which killed bacteria also would kill people.

Penicillin was the first one which didn't. It made bacterial pneumonia easier to cure than the common cold. It cut the time needed to cure syphilis from two years to one week.

• **Discovery**—Penicillin was discovered quite by accident in 1928 by Dr. Alexander Fleming, a British scientist. But nothing much was done with it until 1939, when another new antibiotic, thyrothrycin, was discovered in America. (Since then, thyrothrycin and a later discovery, bacitracin, have not yet been found useful for injection, are currently used in treatment of external and throat illnesses in such forms as salves and troches.) That spurred renewed interest in Fleming's discovery—just in time to meet a tremendous war need.

The British asked the U. S. drug industry to help out. Three pharmaceutical houses immediately agreed—Pfizer, Merck & Co., and E. R. Squibb. Under a governmental coordinating committee, these companies pooled all their scientific resources to boost production.

• **Problems**—It wasn't long before others joined up. All over the U. S., uni-

versity and industrial laboratories went to work.

Originally, penicillin was obtained by skimming the mold off the top of a "broth" in which the culture was grown. The researchers found a "deep culture" method in which the mold could develop in an entire tankful of broth.

Meanwhile, researchers at Cornell University found a way to make penicillin chemically, instead of by growing mold. But synthesis has never been put into productive practice. No synthetic method can compete in price or efficiency with the natural method that has developed on such a large scale. Today, antibiotics are produced in huge tanks, ranging up to 20,000 gal. in size.

• **Outsiders**—Since the manufacture of antibiotics is basically a fermentation process, there were some odd side effects in the pharmaceutical business. Most ethical drug houses (which sell to doctors direct) and proprietary houses (which sell to the public direct) had little experience with fermentation. An exception was Pfizer, a bulk producer who sells to other drug houses which make the final product. It had been making citric acid for years through fermentation.

Two fermenters who had no pharmaceutical background joined in the big rush for penicillin production early in the game. One of these was Commercial Solvents, which had been making butyl alcohol. The other was Schenley Laboratories.

• **Improvements**—At the same time, great improvements were made in penicillin itself, both in purity and in ways of administering it. Today, for example, a penicillin pill of a few thousand units taken soon after contact will prevent venereal disease.

The trouble is that it is easier said than done—you still have to have a doctor's prescription to buy the major antibiotics. Over-the-counter sales are sure to come, but probably not for a while. The main reason: Doctors have raised a terrific howl about the Food & Drug Administration putting antihistamines on an over-the-counter basis. So any move to get antibiotics out of the little black bag and onto the druggists' counters will be met with really heavy opposition.

• **Streptomycin**—The next big step after penicillin was the discovery of streptomycin by Dr. Selman Waksman of Rutgers University in 1944. This drug had many weaknesses that penicillin didn't have. It failed to hit the broad range of bacterial infections that penicillin destroyed, and it was likely to produce either temporary deafness, dizziness, or several other side effects.

But streptomycin stuck while other equally toxic antibiotics failed even to get started. It was the first drug of any



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kind which would make a dent on tuberculosis.

• **Production**—Once more Merck, Pfizer, and Squibb started production rolling. In 1946, they began commercial production of streptomycin, turned out 1,152 kilos in that year. By 1949, eight companies were making streptomycin, last year turned out a total of 83,699 kilos.

Today there are still only eight producers of streptomycin as against 13 of penicillin. Yet the competitive position is on the same distress-merchandise level. Only unprecedented foreign demand has kept the bottom from falling out of the price altogether.

II. Effect on Predecessors

What have these "wonder drugs" done to the market of their predecessors? When penicillin came along, it was assumed that its greater effectiveness and wider application would put an end right there to sulfa's short career. It didn't. Last November, for example, more penicillin was produced than in any month in history—14-trillion units. But it was also the biggest production month in sulfa's history.

• **Complete Absorption**—More than that, none of the production of "wonder drugs" is going into inventories; at the low prices competition has enforced, it's being absorbed as fast as it is made. But what makes the producers uncertain—and has pushed down the price—is the fear that someday the stuff is going to begin piling up.

• **The Older Compounds**—So far, the "wonder drugs" haven't cut in too much on the vast array of elixirs, barbiturates, and other compounds which have built the drug industry to its present size. This is probably because few of these were specific treatments. Instead, they primarily relieve symptoms, or give a patient comfort. Cough sirup, sedatives, and pain relievers, for example, are still used in pneumonia.

• **No Revolution**—What this means, of course, is that antibiotics have caused no revolution in the drug industry. The industry itself doesn't consider them the greatest thing that has ever happened to their business. As one Merck executive put it: "Antibiotics are one of the drug industry's three big siege guns of the last 20 years. The other two are vitamins and the sulfas." These three things together have, nevertheless, boosted ethical drug sales from \$133-million in 1935 to \$714-million last year.

III. The Doctor's Job

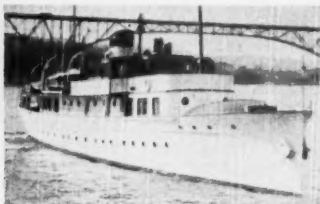
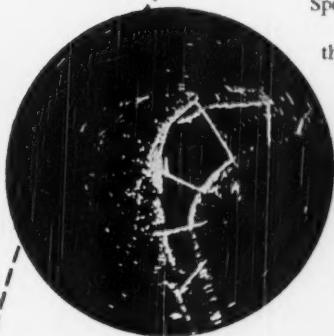
Antibiotics have gone a long way toward making the doctor's job easier. Fifteen years ago, about the only treatment for pneumonia was codoin, a

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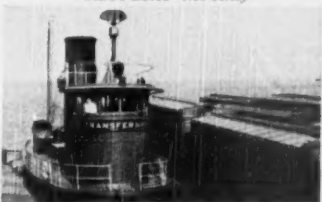
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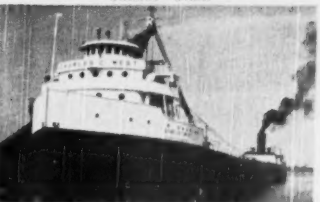
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fever drug, a mustard plaster, and a prayer; there was nothing a doctor could do that would actually cure the disease. Now, once he has diagnosed them properly, the doctor can cure a whole raft of bacteria-caused diseases. (Penicillin has given the hospitals a break, too. Although they buy it for next to nothing, they charge from \$3 upward per injection—thus helping to balance the budget.)

From another standpoint, the antibiotics have made the practice of medicine harder. For one thing, the new drugs are getting more and more specific in attacking diseases. That means that doctors have to have more knowledge and be better diagnosticians to use them properly, safely, and effectively.

• **Attack on Rickettsia**—Today, new antibiotics are already taking their toll of certain serious rickettsial diseases. Both Lederle's Aureomycin and Parke, Davis's Chloromycetin have had dramatic success in the year they have been on the market. Pfizer's Terramycin is about to join them. The big thing about these new antibiotics is that they hit diseases which neither penicillin nor streptomycin would touch—rickettsia such as whooping cough, dysentery, Rocky Mountain spotted fever, typhus, and typhoid fever.

One of the impressive things about these drugs is their low toxicity. Partly because of that, Lederle and Parke, Davis have been selling all they can make. Yet on Feb. 1, both companies reduced their prices 20% because of "lowered production costs."

• **Terramycin**—Probably an influencing factor in this move was the discovery by Pfizer of Terramycin. Indications are that it is (1) the least toxic antibiotic since penicillin; and (2) may possibly have an effect on both rickettsia and some viruses.

IV. The Job Ahead

What about the future?

From a profit standpoint, the immediate future looks dark for every company that doesn't find an antibiotic it can call its own. But many such antibiotics are sure to be found; there are thousands that haven't yet been isolated or tested.

• **Two Jackpots**—This means that from a medical standpoint the future is bright. For the only antibiotics which will count, dollarwise, for their discoverers and producers are those which will do what others will not do. And there are a lot of diseases left to be conquered.

But to researchers there are two real jackpots. One is the discovery of an antibiotic that will hit tuberculosis with the same overwhelming power that penicillin has hit pneumonia. The other is to find an equally effective agent against viruses like infantile paralysis

and the common cold. Whichever company finds these first will be in the most enviable position in the history of the drug industry.

• **Big Question**—Nevertheless, every company making antibiotics—and every doctor—is faced with a permanent question: Will the "wonder drugs" always be effective against the microorganisms they now attack? In the insecticide field, nature has created strains of insects which are wholly resistant to the same DDT which wiped out their ancestors in a flash. There are already signs that the same thing is happening in microbiology: Some strains of bacteria are completely resistant to every antibiotic.

Streptomycin is the worst offender here—it invokes a greater resistance than any other antibiotic. One reason is that it must be administered over a longer period of time—about 40 days. And once the resistance sets in, it seems to be permanent with that particular bacterial strain. In some cases, this resistance has gone so far that certain bacteria actually won't grow at all unless streptomycin is present. What is one bug's poison is another bug's meat.

But already science has found ways to combat resistance at least to a degree. Dr. Waksman at Rutgers has found an offshoot of streptomycin called neomycin, which is equally effective but has a much smaller resistance factor. Its one drawback is a higher toxicity.

• **What Next?**—These things do not worry the drug industry too much for one big reason: Antibiotics are not the last advance that ever will be made in the treatment of disease. Merck & Co., for example, has developed a product called cortisone which shows dramatic promise in the treatment of arthritis. This hormone is not an antibiotic. Neither is a substance called TB-1, or Tibione, which, if it proves to be nontoxic enough, may be the answer to tuberculosis. This is a chemical discovery of the Bayer Co. of Germany. Tibione is Schenley Laboratories trademark for the German chemical, but Squibb and others are working on this and related compounds. And a new vitamin-B-12—a byproduct of streptomycin manufacture, is a cure for the deadly pernicious anemia.

These and many other developments still in the future might some day mean man's complete victory over disease. For antibiotics alone have made it almost certain that infectious diseases will soon become a medical curiosity. This in itself led Dr. Morris Fishbein to predict recently that the drug industry would some day be the biggest in the U.S. Most drug men loudly disagree with this.

But they know in their hearts that the long-term outlook is brighter today than it has been at any time in their history.

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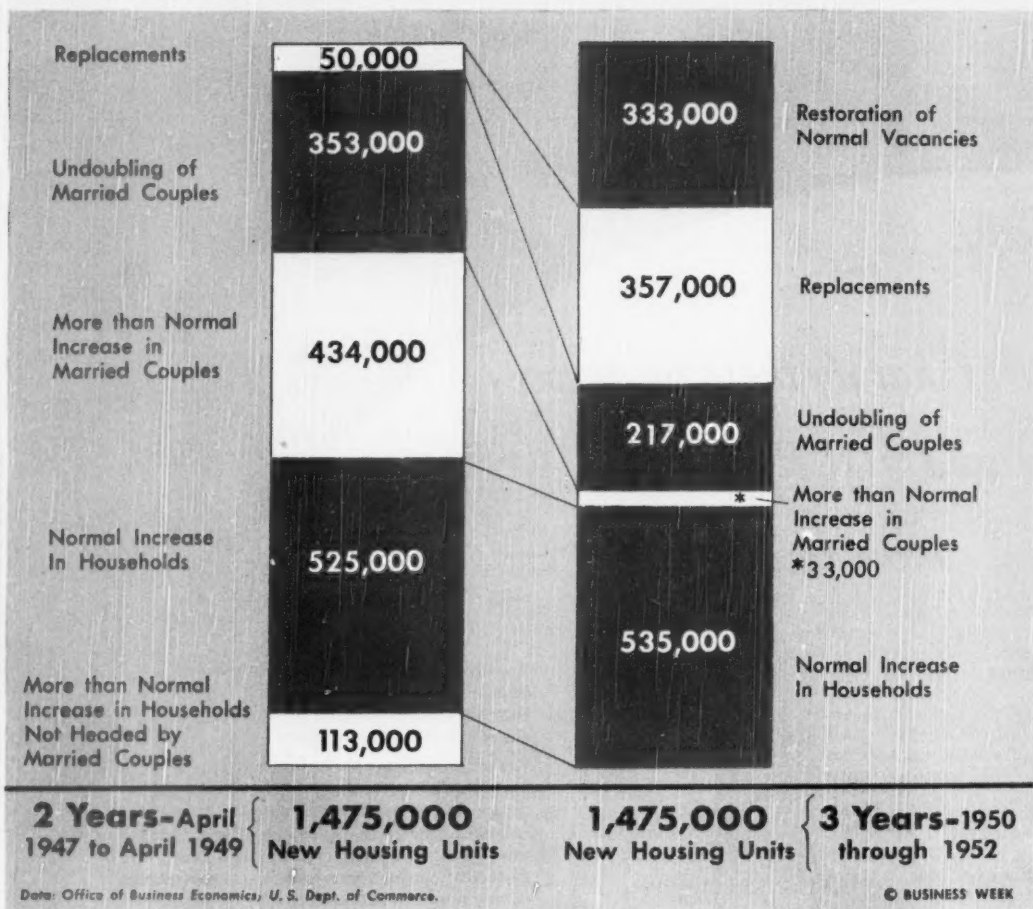
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HOUSING



EVERY YEAR, 1,475,000 more dwellings. That was the record for two years, and it looks like three more years of . . .

Housing Boom—Held Over by Demand

Commerce Dept. survey sees demand for 4.4-million dwelling units—enough to keep business rocketing till 1952.

Ever since the end of the war, residential construction has been one of the mainstays of the general business boom. In the past nine months, especially, it has been the lustiest part of the whole U. S. economy.

But how much longer can home building boom? This is fundamental for any businessman trying to take a look into his future.

• **Solid Prospect**—Answer: a good long time—probably three more years at a minimum. That's the conclusion of a study published this week in the March

Survey of Current Business. It was written by S. Morris Livingston, top-flight economist of the Commerce Dept., just before he left to set up shop as a private consultant (BW—Dec. 3 '49, p. 76).

Livingston's conclusions boil down to something like this:

Construction of dwelling units over the last three years has been two to three times that necessary to take care of the normal increase in households. Around two-thirds of the backlog of demand existing at the end of 1945

has now been worked off. But the remaining backlog is still large enough to assure near-record activity for the next three years.

Here's the way Livingston adds up the various components of current and backlogged demand for homes:

I. Current Demand

Livingston first figured out how much demand is the result of normal trends—assuming there had been no war.

• **Normal household growth.** Judging by previous marriage and divorce rates, the expanding population would produce something more than 500,000 new household units annually in the

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next three years. Allow another 5% for vacancies, and you end up with about 535,000 new dwellings needed every year.

More than normal growth. Higher incomes and more job opportunities have made marriage possible for people who might never have married before the war. Livingston expects that these people will form 33,000 new households a year.

Replacement programs. Houses seldom wear out; so except for slum-clearance programs, there has never been much of a replacement market. However, future government policies—based on social rather than economic considerations—will boost the number of replacements. Livingston estimates the annual average for the next three years at 357,000.

II. Backlogged Demand

In the past three years, new building plus conversion of existing structures produced about 4.5-million new dwelling units (including farm homes, trailers, etc.). Since normal household growth would have accounted for only 1.6-million, the rest must have gone toward working down the backlog.

But Livingston shows that a considerable part of the demand deferred because of the war is still unsatisfied:

Undoubling. Census figures show that by mid-1945 the number of families living with others had risen to 3.5-million—almost twice the 1940 total. By last year, the war-caused doubling-up had, to a large extent, disappeared. But undoubling by the remnant, as well as by families that formerly couldn't afford to live alone, should add about 217,000 units a year to total demand.

Restoration of vacancies. Experience has shown that the nation needs to have about 5% more dwelling units than households to enable people to move freely. In April, 1947, there were about 1-million vacant homes—2.5% of the total. Livingston figures that the vacancy demand to be satisfied over the next three years is still about 1-million units, or 333,000 a year.

III. Outlook

Tote up Livingston's demand estimates and you get a figure of about 4,425,000 dwelling units needed in the next three years, or an annual average of 1,475,000. That's enough to keep the building industry—and maybe all industry—rocketing along at a terrific clip until 1952.

Actually, Livingston thinks the outlook may be even better than figures on existing demand show. He has three reasons:

(1) It takes an extended period of



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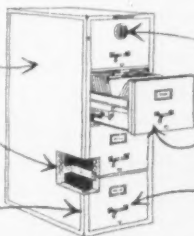
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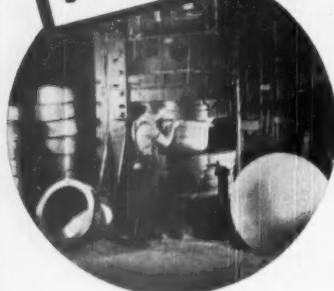


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overbuilding to push the vacancy ratio up to the point where it is a serious deterrent to further construction. Momentum can carry you along.

(2) A big part of the postwar increase in families has been housed in patched-up dwelling units; they are potential additions to replacement demand.

(3) A decline in housing costs, relative to family income, could turn replacement demand into a vastly bigger market factor.

In Livingston's view, broadening demand through lower costs offers a glowing prospect of sustained building activity beyond the volume needed to take care of "normal" demand and the war-created backlog.

Building Materials

Demand for them is shooting up as homebuilding booms, but manufacturers say there will be no shortages.

Makers of building materials are counting on a banner year in 1950. With homebuilding headed for another record (BW-Mar.11'50,p19), they figure that the demand for such things as lumber, hardware, and plumbing and heating equipment will be up anywhere from 5% to 15%.

• **Plenty of Capacity**—And no matter how fast the orders come in, the industry thinks it will have the capacity to handle them. The big suppliers say that builders won't have to worry about shortages any time in 1950. There may be temporary local squeezes. But they won't be serious enough to make any difference in the residential construction picture.

The coal strike slowed down some manufacturers for a while, but they expect to catch up soon. Schlage Lock Co., for instance, says "Demand for our product is exceeding our supply right now. This is largely due to the coal strike. Deliveries of some items are running 60 to 75 days, when a normal delivery period is 30 days." Even so, the company is shipping out about as many items now as it did this time last year. And it thinks that for the year as a whole it will be able to top 1949 by 10% to 20%.

• **Hardware**—Yale & Towne Mfg. Co. says, "No shortage of supply of builders hardware is anticipated so long as there is no interruption in the continuous supply of steel, copper, coal, and other raw materials."

One of the big producers of nails predicts that demand will run well ahead of last year. It thinks there may be occasional spot shortages. Roofing

nails, for instance, may be short in some areas for the next few weeks. But for the country as a whole, there will be all the nails that builders want to buy.

• **Roofing**—Johns-Manville Corp. is building up its inventories of roofing materials and foresees no shortages during the year. American Radiator & Standard Sanitary Corp. expects "satisfactory" demand and predicts that it can take care of any possible increases.

You can expect prices to firm up on some items, though. Lumber and mill-work prices already are on the way up. The trade predicts that this year they will average 10% to 15% higher than 1949.

• **Temporary Rise**—Prices of plumbing and heating supplies may rise temporarily this spring—especially if demand takes a jump before the manufacturers build up depleted steel inventories.

The Dept. of Commerce, which keeps tabs on the building industry, is also optimistic about 1950 prospects. But it is more restrained than most makers of building supplies. Commerce is still working on the assumption that residential construction in 1950 will run somewhat behind 1949.

Senate Kills Co-ops; 608 Gets Drop of Blood

Defeat of housing cooperatives in the Senate last week pretty well killed the idea for this session. The House has still to act on the proposal to make low-interest loans to nonprofit and co-op groups through government-backed corporation. But chances are slim of co-op aid's getting representatives' O.K.

Except for the co-op feature, the Senate bill was substantially the one that came out of the Banking Committee. It increased authorizations for FHA mortgage insurance and liberalized the provisions of the National Housing Act to stimulate building of low-cost homes for sale and for rent.

• **608 Lingers On**—The Senate also voted \$400-million additional insurance authority for rental-housing loans under the controversial Section 608 (insurance up to 90% for the actual cost of apartment projects). It further authorized FHA to process 608 applications filed before Feb. 1.

Section 608 expired Mar. 1. Under the law, FHA could honor only mortgage loans on which it was fully committed by that date. If approved in the House, the amendment would go a long way toward assuring as much new construction under Section 608 in 1950 as in 1949.

Liberalization of the permanent rental-housing section—207—is counted on by the Senate to take up any construction slack caused by death of 608.



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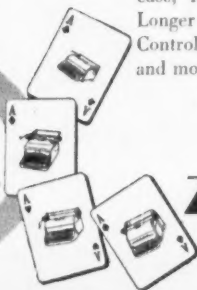
Super-riter—created out of the world's longest experience in typewriter production...77 years of it! *Super-riter*—efficiency-tested to save on office typing costs—sleek, functional in design. The Remington *Super-riter* will perform better...faster...at measurably less cost. Here's why:

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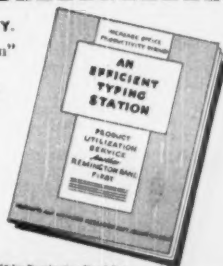
- ☐ Please send me FREE bulletin, "An Efficient Typing Station" on the superb new Remington Super-riter.
- ☐ Please arrange to have your representative call to perform the FREE Super-riter Savings Test in my office—without obligation, of course.

Name..... Title.....

Company.....

Address.....

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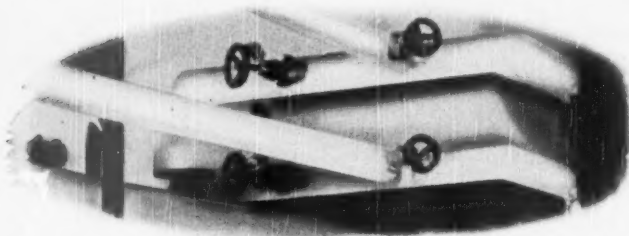


To seal an envelope-or hold insulation in place



• Envelope adhesives are selected on the standards of how they work in the envelope-making factory, how they stand up and look on the flap, how well they re-moisten and re-tack, months or years later. Arabol's UDO 54 — new but thoroughly tested — is meeting every demand made by leading envelope makers.

The requirements for a lagging adhesive are wholly different. It must hold in place the cover insulation on steam and hot water lines, boilers and storage tanks, cold water lines, air ducts and all similar installations. It must make a secure bond between the canvas and any type of formed insulation. It must be strong and long-lived in its service—indoors or out, on land or at sea, under every extreme of temperature and humidity. Arabol's Lagging Adhesive—created to meet specific war-time needs—has since been welcomed throughout the country and thoroughly proved under every conceivable condition.



Somewhere in your business, adhesives are required — in the making of your product, in its labeling, packaging and/or shipping case. To find the one best adhesives formula for each particular application, we offer you our 65 years of pioneering experience and the services of any of our five laboratories.

Ten thousand adhesives formulas have thus far been developed in our laboratories. Today we serve the leaders in a hundred different industries — for a thousand different uses. The cost of having "specification" adhesives — for each of your requirements — is so low you can't possibly afford any but the best. The cost bears no relation to the service, protection and insurance rendered.

We invite you to write for detailed bulletins on Envelope Adhesives and/or Lagging Adhesive and for specific information on any other adhesives requirement. We also suggest that you see the Arabol Representative when he calls; he knows adhesives.

THE ARABOL MANUFACTURING CO.

Executive Offices: 110 East 42nd St., New York 17, N. Y.

CHICAGO • LOS ANGELES • BOSTON • ST. LOUIS
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Adhesives?... **ARABOL!**
65 YEARS OF PIONEERING

21 Men vs. Slums

St. Louis Redevelopment Corp., bossed by 21 businessmen, plans major building project near downtown district.

One morning 21 St. Louis businessmen shuffled through their mail, stopped when they came on a telegram from Mayor Joseph M. Darst. It read: "All obstacles which, in the past, have blocked the clearance and redevelopment of our blighted areas by private enterprise have now been removed. It is . . . the obligation now of public officials and private enterprise . . . to do the job."

• **\$50-Million Project**—With that command invitation, Darst took the first formal step toward putting the St. Louis Urban Redevelopment Corp. into business. Bossed by the 21 he named, the corporation will give St. Louis its first integrated slum-clearance program under the National Housing Act of 1949 (BW—Feb. 4 '50, p. 25).

Tentative plans for the corporation were threshed out in a City Hall meeting with businessmen last December. The corporation will first try to raise about \$5-million capital through stock subscriptions. With that, it will try for \$45-million more through FHA-insured mortgage loans. These would come either from life insurance companies or banks. They would run for 40 years at 4% interest.

• **5,000 Apartments**—Once it is assured of capital, the corporation will be able to go ahead with plans for construction of 5,000 middle-income and upper-income apartment units near the city's downtown district. The sites for the building will be bought up by the St. Louis Housing Authority and sold to the development corporation at fair re-use value.

Under Title I of the housing act—the slum-clearance section—a local agency can buy up rundown properties and clear all buildings off the land. Then the agency can sell the land at a loss, priced at its fair re-use value. The federal government picks up the check for two-thirds of the write-down loss involved in the resale.

• **Business' Stake**—Business interest in the redevelopment corporation is particularly keen because of the steady growth of slums and blighted areas around the downtown business district. The inroads of the slums have been big factors in the movement of new construction away from the city proper. One retail store after another has built branches in the suburban communities. Almost all postwar home and apartment building has been away from the city.



But you can't mistake "RAZORS" for "RACERS" on Disc Edison Voicewriter

Get Extra Hours This Easy Way

WITH THE AID OF EDISON'S EXCLUSIVE "CLEAR PICTURE" COMMUNICATION

You save valuable time... your secretary helps you more... office output steps up its pace... with Disc Edison Voicewriter.

It's the one machine that gives you the time-saving of machine dictation and gives your secretary the *understanding* of direct dictation. Your thoughts reach paper without delay, without mistakes—

more work accomplished, more easily.

Clearly Defines S, F, Z, TH Sounds

Edison's exclusive Ear-Tuned Jewel-Action gives "clear picture" transmission to words having those *s, f, z, th* sounds that ordinarily give so much trouble.

Because Edison reproduces a thousand more cycles per second—you can dictate in relaxed comfort... your secretary can

match your speed with less effort, less strain, fewer errors.

No other instrument matches Edison *understandability*—only Edison has Ear-Tuned Jewel-Action.

Write us for the helpful free booklet, "How to Simplify Your Daily Life." Address Thomas A. Edison, Incorporated, 45 Lakeside Ave., West Orange, N. J.



Executives save as much as a month a year when they replace old-fashioned handling of communications with the modern Disc Edison Voicewriter. Secretaries are freed for "junior executive" duties.



Compact Disc Edison Voicewriter is expressly built for office dictation and is portable, too—but with no sacrifice of understandability.



For free demonstration, phone "EDIPHONE" in your city or write Thomas A. Edison, Incorporated, West Orange, New Jersey. In Canada: Thomas A. Edison of Canada, Ltd., Toronto 1, Ontario.

Thomas A Edison

"...prettiest picture for sales YOU ever saw!"



**MORE
unfilled needs
MORE
income to meet them**

The 1,177,865 subscribers of the five farm papers of the Midwest Group are ready to buy. In a recent survey, a sample of these readers were asked about their plans for building and buying farm and home equipment. Their answers reveal a market potential that indeed indicates a pretty sales picture.

The best way to sell these people is to concentrate your advertising in the farm publications they depend on most for "buying" information—their local farm papers.

Write for your free copy of 1950 BUYING REQUIREMENTS . . . a preview of what Midwest Farm Paper Unit readers plan to build, farm and home equipment they plan to buy in 1950.

**MIDWEST
Farm Paper UNIT**

WISCONSIN AGRICULTURIST & FARMER
THE FARMER
WALLACES' FARMER & IOWA HOMESTEAD
PRAIRIE FARMER • NEBRASKA FARMER
Midwest offices at: 350 Park Ave., New York
• 59 E. Madison Street, Chicago • 542 New
Center Building, Detroit • Russ Building, San
Francisco • 1324 Wilshire Blvd., Los Angeles

CAMERA VISITS INDUSTRY



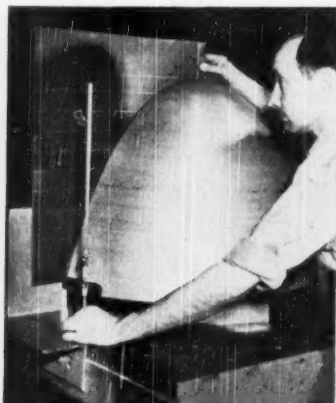
1 PATTERN MAKER turns out series of wooden forms used to produce propeller spinners at Hamilton Standard Division, United Aircraft Corp., East Hartford, Conn.

Prop Spinners Need Craftsman's Touch

Metal workers at Hamilton Standard use "body English" to form aluminum plate into shell to cover airplane propeller hub.



2 MANUAL PRESSURE on aluminum sheet mounted against wooden form gradually shapes the metal into a smooth propeller spinner.



3 DIMENSIONS of the spinner shell have to be checked carefully by hand with gages and templates before internal structure goes in. (TURN TO PAGE 48)

(Advertisement)

WHAT'S DOING IN DALLAS



THINK OF DALLAS

...and you think of beautiful girls. As Norma Peterson, this Southern Methodist (Dallas) co-ed has had a kind of career as sweetheart of a magazine-cover All-American. As Mrs. Doak Walker, her future now will be that of wife of a professional football player (Doak has signed with the Detroit Lions). Both grew up in Dallas and have attended S.M.U. together.

DALLAS BRIEFS

The Dallas skyline includes the lofty spires of two television transmitter towers of two presently operating stations, KRLD-TV and KBTB (soon to become WFAA-TV).

"The Dallas Southwest" regional concept comprises Texas, Oklahoma, Louisiana, New Mexico, Arkansas and Mississippi, plus 26 counties of western Tennessee, in a market radiating from Dallas.

The Dallas Community Chest operates from its own headquarters building in downtown Dallas, the stately, 2-story Jennie and Joseph Schepps Memorial.

MAGNOLIA (Thumbnail sketch of a

By Julian Stag

A lofty landmark in Dallas is the Flying Red Horse, galloping across the skyline 450 feet above the street.

Among America's unique outdoor signs, it rotates in neon glow atop the 29-story Magnolia Building, home of one of the great organizations in Texas' oil industry.

Magnolia Petroleum Company is a corporation employing some 12,500 persons (1,400 in Dallas).

It produces about 138,000 barrels of crude oil daily from some 9,900 wells in 10 states, operates two refineries, has a more than 50-million-dollar payroll annually, and owns through Magnolia Pipe Line Company, a subsidiary, 9,200 miles of pipelines extending into nine states.

A pioneer in the oil business, Magnolia's real beginning goes back to a small refinery

Businessmen Back City's Culture

Nationally-famous Dallas Symphony, N. Y. "Met" Opera, Theater '50 are among varied projects. Formula for cultural urbanity is found in broad-based support by economic interests.

■ Among Dallas' industries, to use the term broadly, is culture.

Dallas has a major symphony orchestra, a professional theater, and a summertime operetta.

Its grand opera is that of the great New York Metropolitan.

These items take top billing on Dallas' cultural marquee; there are also many added attractions in a city that has a flair for the finer things of life, as well as fun.

Dallas businessmen believe culture to be good for Dallas, and also good business; thus culture in this city belongs not to a coterie of plutocrats, or angels, but is civic in character.

The "Met" will be in Dallas next month (April 28 to 30). When it made its first annual visit to Dallas in 1939, it was its first such crossing of the Mississippi since its national tour of 1905, which also included Dallas.

A Dallas businessman had had the idea. He'd go to New York, and talk it up, year after year. Finally, he sold New York, on condition that Dallas put up a sufficient guarantee.

He hustled back to Dallas and sold Dallas businessmen on putting up the guarantee. The Met has paid its way brilliantly each season in Dallas, and the guarantee (now underwritten to the tune of \$200,000) has proved merely technical.

The local operatic event is sponsored by the Dallas Grand Opera Association, whose roster of directors reads like a local who's who of Dallas business, industry, and finance.

■ After the war, a new Dallas Symphony Orchestra was born (the city's symphonic tradition dates back at least to 1900).

Symphony in Dallas is about a \$300,000-a-year business operation (90 people).

Dallas industry)

established in 1898 at Corsicana, south of Dallas; it was the first refinery in the Southwest.

Formed as Magnolia in 1911 by the original and successor interests, it later joined Standard of New York (Socony), which in turn merged (1931) with Vacuum Oil. Magnolia is today the major domestic crude oil source for Socony-Vacuum; hence, Magnolia's use of the Flying Red Horse as the identifying trade-mark for its products.

Its management is up from the ranks. The president of Magnolia is E. L. Latimer, who, interested in the oil industry as a likely business for a young man to follow, came to Texas from Olean, N. Y., to work in the oil fields. He became Magnolia's chief executive in 1946 after 30 years with the company.

A Dallas investment man (D. Gordon Rupe), not known particularly as a concert-goer, spearheaded a postwar drive for the new orchestra, and himself gave something like \$148,000 in the first three seasons. Many Dallas firms now pay "memberships", ranging from \$100 to \$7,500.

The Dallas Symphony is heard on national networks, on RCA-Victor Red Seal records, and widely on tour.

Its youthful, accomplished conductor, New Jersey-born Walter Hendl, recently flew to South America on a talent-scouting trip, subsequently introducing a Brazilian pianist at a Dallas "Concert Between the Americas" (sponsored by Braniff International Airways).

On April 1, Hendl will be guest conductor of the New York Philharmonic. Next season, he will take the Dallas Symphony on a Mississippi Valley tour, giving two concerts in Chicago.

■ Dallas' Theater '50 (successively Theater '47, '48, '49) is one of the talked-of dramatic projects nationally.

Thanks to it, Dallas has a full 30-week season of high-quality theatrical fare, currently ranging from Shaw to Shakespeare, Ibsen to Sean O'Casey (first production of "Cock-a-Doodle-Do").

This is a professional company of actors paid the Equity scale; its managing director, Texas-born Margo Jones, is a Broadway producer and director, who divides her time between New York and Dallas.

Miss Jones' goal is to see professional theater (not to be confused with amateur "Little Theater" groups) a going concern in many cities, not the exclusive property of New York or the West Coast.

She found Dallas' cultural climate to be right for the idea, and she also found local backers, notably oil geologist Eugene McDermott, who heads the theater's trustees.

■ There are many other sides to the Dallas cultural story. In fact, there is a standing "Dallas Invites You" Committee beckoning all to visit and be pleased.

The man who brought the Metropolitan Opera to Dallas was the late Arthur L. Kramer, Sr. (president of A. Harris department store).

He used to say: "Modern economics leave few millionaires able to dispense huge sums of money. The art establishments must be supported widely by all public-spirited citizens."

That is about the idea that Dallas businessmen seem to operate on.

Lone Star Gas Company paid for this advertisement for the Dallas Chamber of Commerce. It is the third of a monthly series to keep you posted on Dallas, the city of opportunity in the Southwest. Would you like copies of this advertisement or other information? Address: Dallas Chamber of Commerce, Dept. B—Dallas 2, Texas

GULF

increases storage space 50%
and cuts car-loading time in half—
with *Battery-Electric* trucks



Car-loading time was cut in half with pallets and battery-powered trucks.

**... safety and economy assured
in Philadelphia refinery**

The Philadelphia Refinery of the Gulf Oil Corporation recently modernized the material-handling operations of its Package Department. The project included installation of a pallet and battery-electric truck system to handle containers of oil products varying from one-quart cans to 55-gallon drums.

Immediately, manual handling operations were reduced, making it possible for the Package Department to handle more tons per man-hour and do so more easily. Battery-electric trucks now tier 55-gallon drums—formerly an almost impossible manual operation—thus increasing the effectiveness of floor space 50% by more efficient utilization of cubic storage space.

Previously freight-car loads of cartons shipped to certain destinations had been loaded manually. Now electric trucks load these palletized cartons and car loading time has been cut in half.

Because handling of flammable materials call for safe flame-free operations, battery-powered trucks of spark-enclosed construction were chosen. The efficient, quiet and dependable performance of these trucks has kept operating costs to a minimum.

This is another example of why cost-probing, safety-conscious management buys battery-electric trucks.

THE ELECTRIC INDUSTRIAL TRUCK ASSOCIATION

3701 NORTH BROAD STREET, PHILADELPHIA 40, PENNA.

SPINNERS (Cont'd from page 46)



4 NOSE of the spinner gets holes drilled for rivets to mount it to main spinner section. A subcontractor makes the noses.



5 ANODIZING is the next step. It's a process of forming an oxidized outer coating on the metal for protection.



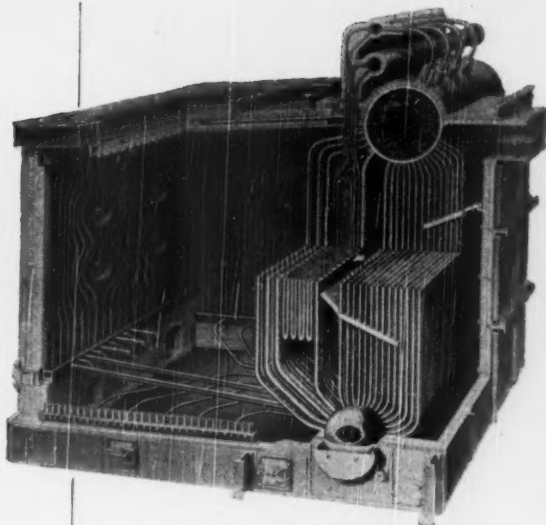
6 REAR SECTION is assembled in the production department. Next step is riveting it onto the nose section.

(TURN TO PAGE 50)

Doesn't this describe the boiler you want?

- *Design features that assure low operating and maintenance costs.*
- *Exactly fitted to your particular conditions of fuel, load, space.*
- *Service-proved in plants similar to yours.*

- **With the C-E Vertical-Unit Boiler** you get features of design and construction that reflect Combustion's long experience in meeting the exacting performance requirements of large utility power plants... features that assure exceptional reliability, together with low operating and maintenance costs, throughout the lifetime of the equipment.
- **No matter what your combination** of requirements, the Vertical-Unit Boiler can meet the needs of your plant exactly. The VU design covers a complete range of capacities, from 10,000 to 300,000 or more pounds of steam per hour, with steam pressures up to 1000 psi and temperatures up to 900 F, or higher. Firing may be by pulverized coal, oil or gas, as well as by any type of mechanical stoker, depending on your local fuel situation. In addition, the compactness of these units makes them well suited to limited space conditions.
- **The Vertical-Unit Boiler** has made an outstanding record in meeting the widely varying requirements of plants in virtually every branch of industry — at efficiencies ranging




THE C-E VERTICAL-UNIT BOILER
TYPE VU-50

up to 88%. Throughout the United States and Canada, Latin America and abroad, the VU has been selected for installations with an aggregate capacity of well over 100,000,000 pounds of steam per hour.

Finally, every Vertical-Unit Boiler reflects Combustion's 60 years experience in designing and manufacturing boilers of all types. So whether you are considering the purchase of equipment for replacement or expansion, or for a new plant, you can turn with confidence to Combustion and find, with the Vertical-Unit Boiler, the right answer to your particular situation.

B-393

COMBUSTION 
ENGINEERING—
SUPERHEATER, INC.

200 Madison Avenue • New York 16, N. Y.

WHAT Management SHOULD KNOW about FLOOR-MAINTENANCE MACHINES

The area of a floor, whether it is congested or open, the type of flooring and whether it is easy or hard to clean—these, among other factors, determine the floor-maintenance equipment. For most effectual, economical floor care, choose accordingly.

For large-area floors, a combination scrubber-vacuum is the labor-saving answer. *Finnell's 213-P* applies the cleanser, scrubs, rinses if required, and picks up. Has a cleaning capacity up to 8,750 sq. ft. per hour!

For small-area floors, a 13" all-purpose machine, such as the new 713 *Finnell*, is a wise choice. This machine polishes, applies wax, wet- and dry-scrubs, light-sands, applies seal, steel-wools, and shampoos rugs! Yet it is priced incredibly low.

For grease-caked floors, a dry-scrubber with powerful scarifying brushes affords the fastest cleaning method. *Finnell's 84-XR*, with its self-sharpening brushes, cleans grease-caked floors in one-tenth the time required when hand-spudding!

For general use, average duty, substantial savings are effected with a 100 Series *Finnell*—the machine that's two sizes in one!

For general use, heavy duty, with emphasis on polishing needs, choose a motor-weighted machine. *Finnell Motor-Weighted Machines* give eight-way adaptability!... have safety switch on handle.

Because *Finnell* makes machines for every type of floor care—and in a wide range of sizes—you can depend on *Finnell* for unbiased advice as to the equipment that's right for your needs. For consultation, demonstration, or literature, phone or write nearest *Finnell Branch* or *Finnell System, Inc.*, 3803 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



FINNELL SYSTEM, INC.

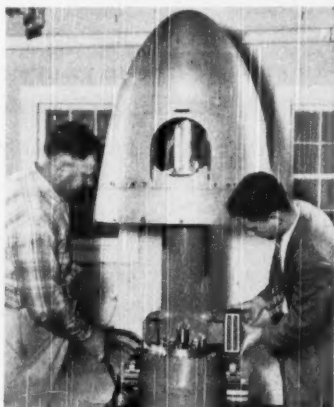
Pioneers and Specialists in
FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES
IN ALL
PRINCIPAL
CITIES

SPINNERS (Cont'd from page 48)



7 RUBBER TAPE is inserted between rear section "skin" and internal supports to prevent chafing of metal against metal.



8 MACHINES TAKE OVER. Measuring device, held on spinner, checks effect of vibrations from hammer blow.

Spinner Returns

The spinner that covers the airplane propeller hub is not just a decoration. It has an aerodynamic function: It smooths the flow of air around the hub, directing it into the engine for cooling. The streamlined snout also reduces compressibility—the pile-up of air in front of the flying plane.

With development of new high-speed, propeller-driven planes, aircraft makers are starting to use prop spinners again. So, naturally, Hamilton Standard Division of United Aircraft Corp., an oldtime prop-spinner maker, is noting a revival of demand. And they're making the spinners the same old way.

Hand craftsmen do most of the operations with wooden forms on simple spinning lathes. Precision requirements—spinner form can't vary more than 0.05 in.—mean skilled operators.



NO TICKEE, NO ...

COLOR PHOTOGRAPH BY WILTON STUBBS

Serving the nation on a different scale from the little hand laundry, which most of us can picture so vividly, are the big commercial, mechanized laundries which most of us never see inside. Here is continuous technological progress, as in other large industries . . . automatic machinery, precision controlled temperatures, multiple washing formulas. Because of the modern methods, women can unhesitatingly trust commercial laundries today with difficult fabrics, difficult colors—and the shirts of difficult husbands.

Highly specialized washing compounds are key elements in the new processes. DIAMOND ALKALI'S continuing laundry research has developed washing compounds to solve every problem arising from varying water and operating conditions, for every region, every climate, every season and every kind of soil.



Chemicals you live by

DIAMOND ALKALI COMPANY...CLEVELAND 14, OHIO

SODA ASH • CAUSTIC SODA • CHLORINE & DERIVATIVES • BICARBONATE OF SODA • SILICATES • CALCIUM COMPOUNDS • CHROME COMPOUNDS • ALKALI SPECIALTIES

You can afford a MACK



because Mack outlasts them all!

- 1. You save on long life . . .** One Mack will out-wear and out-perform a whole series of cheap vehicles. Your investment, annually and over the years, is far lower . . . with a Mack.
- 2. You save on maintenance . . .** A Mack's component parts are rugged, durable and specifically designed and engineered for the job. Maintenance costs are lower . . . with a Mack.
- 3. You save on uninterrupted service . . .** "Absenteeism"—lay-ups in shop—can cost you dearly. Revenue, good will—and in the case of fire apparatus—even *lives* may be lost!
- 4. You save on trade-in value . . .** Any used Mack—any year, any model—commands a premium in any market. You profit while you use, and you profit when you sell or trade.
- 5. And . . . important savings with Mack diesels . . .** Owners of Mack diesel-powered trucks report as much as 75% more miles per gallon at less cost per gallon. Mack diesel-powered bus operators report savings well over \$1,000 per bus per year.

Be profit-wise . . . modernize with Mack

See your Mack branch or distributor today for the world's best buy in trucks!

Mack Trucks, Inc., Empire State Bldg., New York 1, N. Y. Factories at Allentown, Pa.; Plainfield, N. J.; New Brunswick, N. J.; Long Island City, N. Y. Factory branches and distributors in all principal cities for service and parts. In Canada: Mack Trucks of Canada, Ltd.

MARKETING

FOOD CONTAINERS : Glass vs. Metal

Shipments	Glass Containers (Thousands of Gross)	Metal Cans (Short Tons of Steel)
1940.....	23,557	1,676,559
1941.....	22,103	2,141,735
1942.....	21,989	1,889,925
1943.....	29,553	1,556,512
1944.....	33,963	1,827,038
1945.....	37,219	2,027,600
1946.....	44,106	2,305,359
1947.....	35,269	2,146,601
1948.....	32,897	2,319,400
1949.....	30,951	2,261,432

BEER CONTAINERS : Glass vs. Metal

Shipments	Returnable Bottles (Thousands of Gross)	One-Way Bottles (Thousands of Gross)	Cans (Short Tons of Steel)
1940.....	2,617	324	86,295
1941.....	3,676	960	139,614
1942.....	6,181	3,095	22,562
1943.....	6,557	1,762	7,282
1944.....	5,808	4,271	40,917
1945.....	5,939	4,419	74,363
1946.....	5,903	878	14,208
1947.....	9,952	3,039	207,337
1948.....	4,038	3,546	281,579
1949.....	1,995	3,001	359,694

Sources: Dept. of Commerce, Glass Container Manufacturers Institute.

Cans Make Real Comeback

The race among cans, bottles, and paper containers for the packaging markets is finally shifting into high. In 1950 you are seeing the first postwar year of all-out competition by these perennial contenders for a multimillion dollar market.

• **Cans Do It**—It's the turning loose of tin cans that makes the difference. Metal cans—the heavyweight of the packaging field—shook off the last of their wartime controls only last December. Most of the government strings on can output were cut last summer. But the tin can's 1949 record still was marred by the fact that for part of the year it had one hand tied.

Looking ahead, Dept. of Commerce officials—who have just analyzed 1949 results—don't expect any sensational competitive upsets in 1950, although the infighting will be fast and furious. Here are the highlights of their findings:

• Metal-can shipments hit a new high in 1949—1% above record-breaking 1948 shipments. Can use will probably go a notch or two higher this year.

• Glass-container use dropped about 8%—but it's expected that shipments this year will be about equal to 1949, or even a shade higher.

• Beer cans took a bigger piece of the brew market in 1949—at the expense of both returnable and "one-way" glass bottles (the kind you don't pay a deposit on and don't have to return). Cans will get a still larger share in '50.

• Use of paper milk bottles kept growing—while glass milk bottle production held level. Paper will wrap around more milk in 1950, too.

The blow-by-blow account of the battle of the packages goes like this:

I. Cans vs. Glass

Use of cans for food dropped a mere 2.5% in 1949—a normal year-by-year fluctuation in a relatively stable section of the container business. But at the same time, the can makers were grabbing off some juicy business in other fields. For instance, cans for beer jumped 28%, and pet foods packaged in cans leaped 35% over 1948. In

both these uses, can sales were still held back during early 1949 by government controls on tin.

Result of the subsequent free competition is that nonfood use of cans rose during the year by 9%—and pulled the total can shipments just enough over 1948 to hit a new record by a slim margin.

Actually, can shipments would have showed up even better last year had it not been for still another factor—the steel strike. It pulled can shipments for the fourth quarter 8% below the same period of 1948.

II. Cans vs. Bottles

The battle for the beer container is a real three-ring circus, with cans due to cut still more into the share of the total that's been going to returnable and one-way glass bottles.

During 1949, beer-can shipments were up 28% over 1948. One-way bottles dropped 14%, and return bottles plummeted to one-half their 1948 shipments.

The see-saw in this competition has been sensational. Cans were held down by controls on tin and steel, but shipments have been creeping and leaping upward ever since the low they reached in 1946.

The newcomer—the one-way bottle—has also seen its production go up and down like a roller-coaster. In 1945, producers chalked up a record 4.4-million gross. But that was accounted for by the business it drummed up with its export bottle for soldiers and sailors overseas. Then 1946 saw the bottom drop out—the heavy, expensive, wartime throw-away bottle just wasn't built for peacetime competition.

The new lightweight no-return bottle came in with a bang in 1947, did even better in 1948, then slid off last year as the beer can began muscling back.

There are angles though, that you shouldn't overlook. For one thing, trends and tastes in beer containers are subject to unexplainable local preferences. For another, low-income groups—big beer consumers—still look with favor on the cents-per-bottle price advantage of the returnable bottle. Then, too, retailers like the returnable bottle; it tends to bring the customer back to the same store.

III. Milk Bottles: Glass vs. Paper

The milk-bottle business has gone up quite a bit—about 50%—over 1940. But stacked alongside the gain in paper milk bottles in the same 10-year period—about 700%—the glass bottle's gains look somewhat less impressive.

By and large, you can chalk up the increase in paper milk bottles to one

DICTATE and TRANSCRIBE WITH ONE MACHINE!

.... the Webster-Chicago Dictation Machine
Takes Dictation, Plays Back



Individuals and Corporations Agree: here's superior dictation service plus many new uses, to speed business, multiply personal effectiveness at amazing low cost.

A Webster-Chicago Electronic Memory Dictation Machine costs one-half to one-fifth as much as conventional dictating outfits in use today. And unless the wire record spool is filed indefinitely, most users need but the one spool which can be used and re-used thousands of times, *without* intermediate erasure or other preparation.



Dictate, Record, Playback

Dictate letters . . . record clinical or laboratory data on the spot . . . record meetings and court proceedings . . . take inventory . . . have held reports overnight . . . all ready to play back or transcribe . . . all with one machine . . . all at astonishing low cost.




Get Low-Cost Dictation Story

Whether your organization is one-man, or giant size, don't deny yourself this flexible, economical daily aid. Mail the coupon for inspiring data.

WEBSTER-CHICAGO

Electronic Memory Dictation Machine

Electronic Memory  the Ultimate in Magnetic Recording

Webster-Chicago Corporation, Dept. BW3
5610 W. Bloomingdale Ave., Chicago 39, Illinois

Gentlemen: Without obligation please:

- () Send me Webster-Chicago Dictation Machine data
() Arrange a demonstration for me

My name.....

Firm.....

Address.....

City..... Zone..... State.....



thing: the increase in sale of milk through retail stores.

With milk costing more per quart, a lot of housewives are saving themselves a few pennies by buying their milk from the store. Food retailers—unlike beer retailers—aren't interested in the job of handling the return of bottles. To them it's a headache—so they push the paper bottle, which doesn't come back to bother them.

Paper-bottle production will go up again this year. More processors have been adding equipment to handle them, which indicates that the demand is firm and effective enough to set new records in 1950.

IV. Others

In other corners of the packaging world, the figures show a fairly uniform picture: 1949 production shipments were less than 1948, sometimes by a big margin. Main reason: Economists and businessmen during 1948 were foreseeing a rosy 1949, and businessmen bought accordingly. During



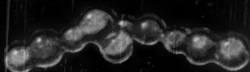
Art in a Cart

It's just as easy to buy paintings as potatoes in New Jersey's Emmet Supermarkets. Last week the grocery chain added 49 oil paintings to the more traditional lines of merchandise in its Caldwell (N. J.) outlet. Most prices had a supermarket ring to them—\$17, \$41, \$73. And payment was in supermarket style, too—over the check-out counter. Emmet takes no commission on the paintings, all of which are supplied by New York and New Jersey artists. At the end of the first week, it had sold two canvasses for a gross of \$45. The store chain will probably put paintings in its other nine stores. It reports grocery sales in the Caldwell store have jumped 25% since the show began.

this spray gun levels microscopic mountains

A Micro Spray
gun produces
an even finish
like this

An ordinary spray
gun produces
an uneven finish
like this



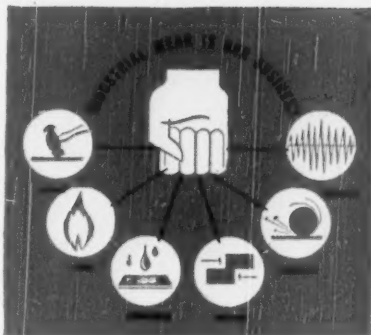
NO OTHER PAINT SPRAY GUN PRODUCES AS SMOOTH A FINISH AS MICRO-SPRAY

The Micro-Spray gun is unique in its ability to atomize paint more finely and distribute it more evenly. The micro-graphs above demonstrate the difference between an ordinary spray gun finish, and the superlative smoothness of a Micro-Spray finish as you would see it under a microscope.

There are other advantages too. With a Micro-Spray gun you get a better breakup of paint that reduces orange peel to the vanishing point . . . you use less paint . . . you require less air.

The shorter overhang of the gun means less weight, less fatigue, better balance, easier handling. You can change from a vertical to a horizontal spray pattern with a twist of the wrist. It's a high speed, production line gun.

It's a sturdily built gun with the exclusive feature of *replaceable* connections at air and fluid entry points. These removable connections cut damage and wear that previously has meant the discard of otherwise good equipment. Write for descriptive literature.



AMERICAN

Brake Shoe
COMPANY

230 PARK AVE., NEW YORK 17, N. Y.

Copyright 1960, American Brake Shoe Company

10 Divisions of American Brake Shoe Co. produce wear-resisting parts in 58 American and Canadian plants.

AMERICAN BRAKEBLOK DIVISION • AMERICAN FORGE DIVISION • AMERICAN MANGANESE STEEL DIVISION
BRAKESHOE AND CASTINGS DIVISION • ELECTRO-ALLOYS DIVISION • ENGINEERED CASTINGS DIVISION
KELLOGG DIVISION • NATIONAL BEARING DIVISION • RAMAPO AJAX DIVISION • SOUTHERN WHEEL DIVISION

CROTTY BROTHERS

Feed

200,000 Workers

Every Day

Employees of business firms in 41 cities and 18 states are now served good, hot meals every working day in Crotty-operated company restaurants.

From a strictly local innovation in Boston, this unique Crotty service has expanded steadily since 1930 because it offers advantages for workers and management alike.

For employees, this service provides better food than most self-run restaurants. For management, it saves valuable supervisory time and complete escape from the problems of restaurant personnel, food procurement, storage, preparation and handling.

Complete responsibility for the cafeteria or restaurant is delegated to Crotty Brothers under the guidance of a single company official. An expertly trained manager and staff are installed whose work is closely supervised by one of the 6 regional Crotty Offices, with direction from headquarters in Boston.

For plants employing 500 or more workers there is a tried and proven Crotty food service adaptable to any need. Many well known manufacturers speak highly of these services and Crotty Brothers' professional know-how . . . the result of 20 years' specialization in industrial restaurant management.

★ A request to any of the addresses below will bring a Crotty Representative to discuss your particular situation.

CROTTY
BROTHERS INC.

OPERATING IN 18 STATES AND 41 CITIES

137 NEWBURY STREET, BOSTON 16, MASS.
111 WEST WASHINGTON ST., CHICAGO 2, ILL.
303 SOUTHLAND ANNEX BLDG., DALLAS, TEX.

FOOD SERVICE
MANAGEMENT
SINCE 1930



1949, there was considerable doubt about the future, and packaged-goods producers trimmed their inventories. The pickup late in 1949 wasn't enough to offset the slack buying of packages earlier in the year. As a result, Dept. of Commerce figures show these 1949-1948 comparisons:

Frozen foods. While demand is high and will probably expand, prices on the frozen product will have to drop still more before paper food-cartons become a threat to the can.

Transparent bags. This was the major exception: Output topped 1948's record. Inability of converters to get some kinds and types of plastic film kept production back a bit during the tag end of 1949.

Collapsible tubes. About the same number shipped during 1949 as 1948. Biggest increases—about 10%—were shown by shaving cream and food products.

Steel drums. Shipments off 14%.

Paper and paperboard for containers. Down about 4%.

Corrugated and solid fiber shipping containers. Down about 3% for the year.

Folding paper boxes. Down about 5%.

Shipping sacks. Off from 1948 by 22%.

Paper bags. Down about 8%.

Nailed boxes and crates. Dropped 40% during the first two months of 1949, but the 12-month drop was only around 12% to 15%.



Jukes Family Expands

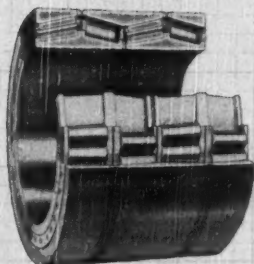
No gingerbread trim and illuminated sunsets are on the Evans Co.'s newest addition to the juke-box family. Displayed at the Chicago convention of the Music Operators of America, this nickel-catcher can play both sides of 20 records.

TORRINGTON ROLL NECK BEARINGS

for greater

rigidity

in Jones & Laughlin mill



Jones & Laughlin Steel Corporation's mile-a-minute cold strip mill (world's fastest) at Aliquippa incorporates the most advanced engineering experience.

A factor contributing to the mill's great rigidity—vital in securing rapid and accurate reduction of steel strip—is the use of Torrington Tapered Roll Neck Bearings specially engineered for use on work rolls.

These bearings accommodate larger roll neck diameters owing to their reduced cross-section, yet provide extra capacity to handle tremendous thrust and radial loads. High quality production and important operating economies are assured by this Torrington Roll Neck Bearing feature. For anti-friction bearings specially engineered to the design and service requirements of your application, call on Torrington.

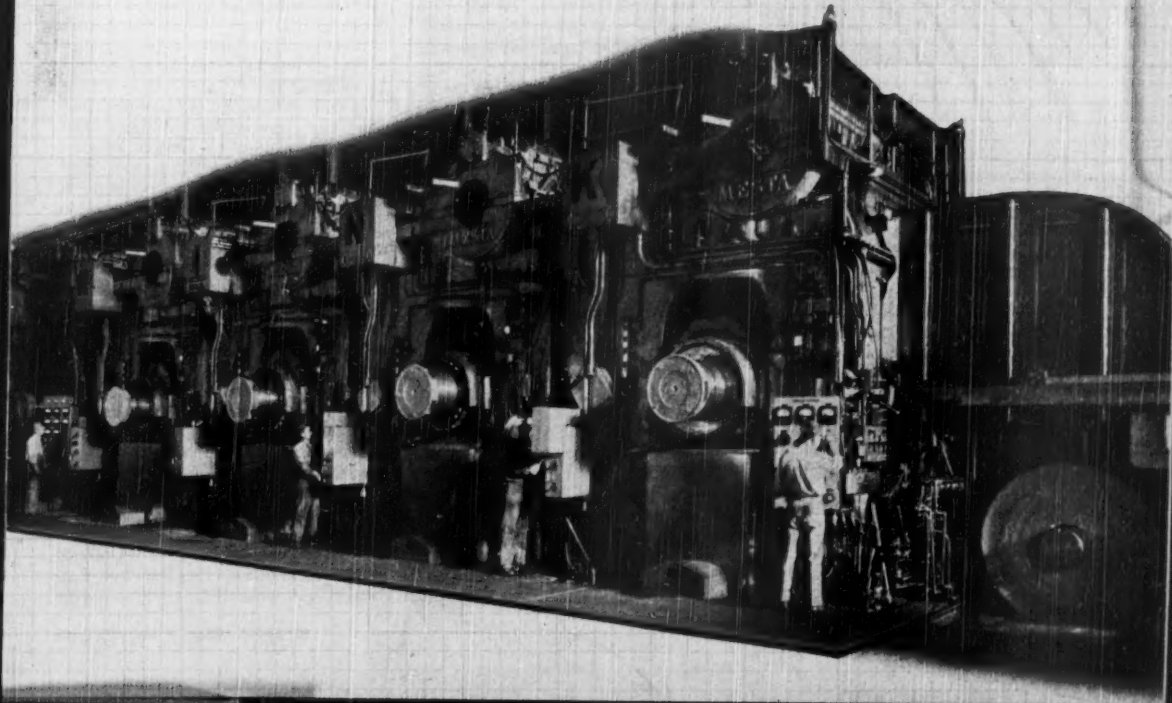
THE TORRINGTON COMPANY

South Bend 21, Ind. Torrington, Conn.

District Offices and Distributors in Principal Cities of United States and Canada

TORRINGTON **TAPERED ROLLER** **BEARINGS**

SPHERICAL ROLLER • TAPERED ROLLER • STRAIGHT ROLLER • NEEDLE • BALL • NEEDLE ROLLERS





"Don't worry about our new salesman being a stranger to his New York State territory. Just..."



...tell him to drop in at the local Marine Midland banks. The people there will help him get acquainted!"

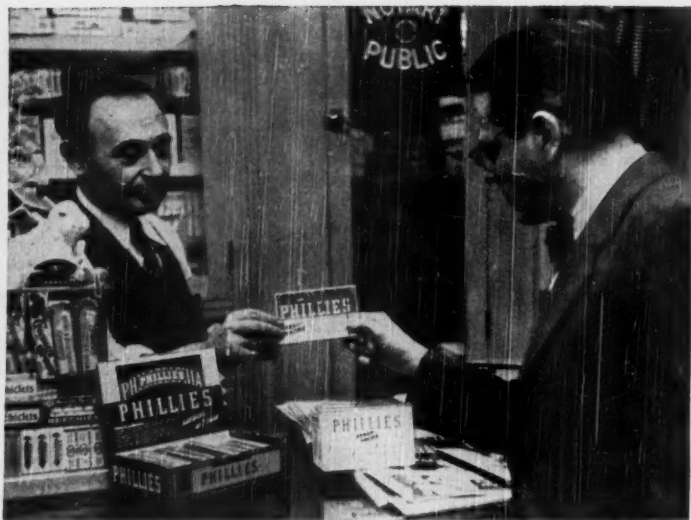
There are many ways in which the local knowledge of Marine Midland banks can benefit you when your company has an account with The Marine Midland Trust Company of New York.

The officers of the Marine Midland banks that serve 49 New York State communities know local industry, business and people. Let us show you how you can use this knowledge to save your time and money!

The

**MARINE MIDLAND
 TRUST COMPANY**
of New York

120 BROADWAY • NEW YORK
 Member Federal Deposit Insurance Corporation



NEW PACKAGE for Phillies attracts customer because it keeps cigars fresh, while old box (on counter) doesn't. Cigar makers look on Bayuk's Fresh-Packs as the big...

Hope for the Cigar Industry

Bayuk has found a way to "triple-seal" cigars in cellophane. Even the competition is cheering. The new wrapper may help stop cigars' long and dismal sales dip.

Bayuk Cigars has given the industry one of its only real gleams of hope since consumption started its long slide many years ago.

What Bayuk has come up with is a new kind of packaging—"triple-seal" Fresh-Packs. The company is packing its Phillies cigar—generally conceded to be the nation's top-selling 10¢ smoke—in three layers of cellophane. One layer seals the cigar itself. A second encloses a cardboard pack holding five Phillies. A third layer of cellophane wraps up five of these boxes into one pack of 25 cigars.

• **Revolutionary**—In any other industry this might not seem very unusual. But in the cigar industry it's nothing less than revolutionary. Said one of Bayuk's competitors last week, "We need this like nothing else on earth."

The reason for this enthusiasm is that up to now the cellophane wrapping around cigars has not been much more helpful, from a practical standpoint, than the label.

When cigar makers tried to seal the cellophane up tight, the cigars went moldy. They have had to leave the cellophane loose so that air can get at the cigar. Aside from prettifying the cigar up, the cellophane mainly serves to prevent breakage. But it doesn't help much to lick staleness—a long-

standing bugaboo of the cigar industry.

• **Factory-Fresh**—It took Bayuk months to learn the trick of getting a tight seal; just how it's done, Bayuk won't say. In January it introduced Fresh-Packs in the East. Now distribution is national. The boxes of five are fair-traded at 45¢; the whole package of 25 costs \$2.25.

Consumer acceptance, says the company, has surpassed fondest hopes. The reason, according to Bayuk: Months after the cigars leave the factory, they come out of the package as fresh as the day they were made.

From Bayuk's point of view, there's an added advantage to the freshness angle. It encourages the man who ordinarily picks a few cigars off the top of the tobacconist's box, to be sure they're fresh, to buy more at one clip.

• **Long Slide**—Chances are that before long other cigar makers will find some way to make a similar type of package. They all need desperately some sort of sales boost. For after coming back somewhat to reach a postwar peak of 5.6-billion units in 1946, the industry's over-all sales have once more resumed their sickening prewar slide.

Even Bayuk has felt the effects of this. Its sales hit a record peak of \$37.8-million in 1948. But last year, they only reached \$31.1-million—a drop

of about 18% from the 1948 figure.

• **Prince Hamlet**—The new wrapping isn't, however, the only string to Bayuk's bow. After the war, the company introduced a new line of cigars called Prince Hamlet, promoted heavily as a quality smoke at an inexpensive price. According to the trade, which has watched the new line warily, Bayuk has been selling Prince Hamlets at a breakeven price in order to get into the market.

Up to now, there have been two Prince Hamlets. One sells at 10¢ apiece. The other is two for 25¢. But very quietly last week Bayuk added two more cigars to the line, retailing at 15¢ apiece and at three for 50¢. It begins to look as though Bayuk is out to compete in the higher-priced field, too.

Hammond Saves Money By Trusting People

"It's a pleasure," wrote a pleased customer to the Hammond Instrument Co. recently, "to be treated like a gentleman by a firm as large as yours."

What brought about this praise was Hammond's policy of trusting the innate honesty of people. A year and a half ago, Hammond began operating its clock repair department on the theory that you can trust people to pay you. This has actually saved the company time and money. Not only that, says Hammond, it is building potential customers for other Hammond products as well: A satisfied owner of a Hammond electric clock may someday be in the market for a Hammond electric organ (BW—Feb. 11 '50, p34). Or he might get interested in the Solovox, an electronic attachment for the piano that produces organlike music.

As a matter of fact, the idea has been so successful that the company is now extending it to the handling of instruction books for the Hammond organ.

• **Major Cost Item**—Before the fall of 1948, the paper work involved in the repairing of Hammond electric clocks was quite costly. When a clock came in, the company first had to spend time figuring out how much the repair would cost, then send out a letter quoting the cost. That meant a delay until the customer authorized the repair. Possibly there would be an exchange of letters. Meanwhile, hundreds of clocks would be jamming up storage space while their owners were waiting.

Hammond's new system is simplicity itself. As soon as a clock comes in, it is fixed—or replaced if it can't be repaired—and shipped back. To save



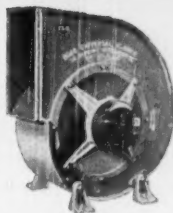
"I strongly recommend
ILG equipment"

Mr. A. W. Gutridge
Sheet Metal Engineer, Los Angeles, Calif.



VENTILATION

Over ten years ago, Mr. Gutridge recommended an ILG Centrifugal Fan to the W. P. Fuller Paint Company of Los Angeles for removal of fumes from paint mixers (above). The exhaust system engineered by Mr. Gutridge is still on the job today, providing Fuller employees with a clear, cool, fresh atmosphere. That's proof that ILG pays-off in performance! And that's why Mr. Gutridge has always "strongly recommended ILG equipment wherever possible." Whatever your ventilation problem, there is ILG equipment "custom-built" to your specifications... capacity-wise, price-wise. Call nearby ILG branch office (consult classified directory) or send coupon today for FREE BOOKLET.



ILG Direct-Connected Centrifugal Fan... saves one-third on space, 25% on installation and maintenance, 10 to 15% on power costs.

FREE! Helpful 32-Page Guide

"HOW TO PLAN YOUR VENTILATING SYSTEM"



ILG ELECTRIC VENTILATING CO., 2807 North Crawford Avenue, Chicago 41, Illinois • Offices in more than 40 Principal Cities

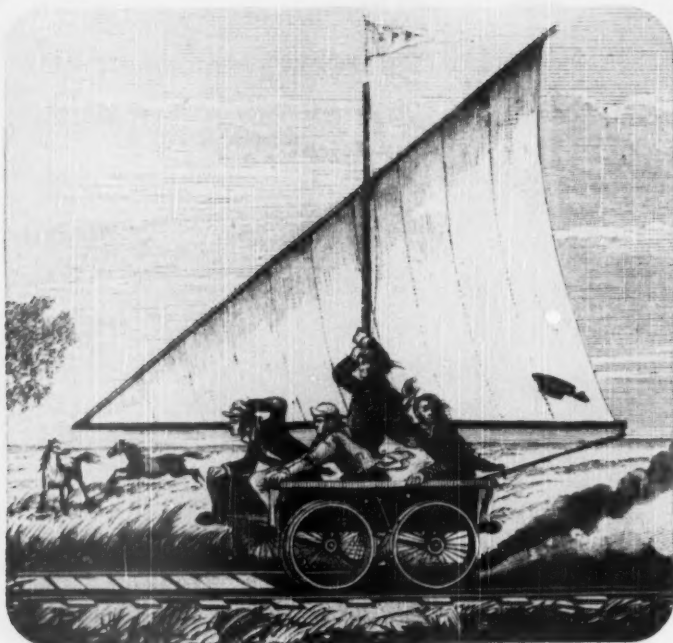
☐ Please send me a copy of your FREE BOOKLET "How to Plan Your Ventilating System."

Company Name _____

Executive's Name _____ Title _____

Address _____ Zone _____

City _____ State _____



The Bettmann Archive

Sails on Rails

This wind wagon of the 19th Century looks weirdly out of place in our age of streamliners and silver wings. Yet, it is an example of many of the early but generally impractical ideas that were explored in the endless search for better power to move machines.

• Paralleling man's search for better power has been his equally determined hunt for better ways to transmit power. And like the wind wagon, many power transmission ideas have left much to be desired.

But tackling and solving problems

of power transmission... finding practical, more efficient methods of harnessing power... has been a specialty with the Twin Disc Clutch Company for 31 years.

Today, wherever power is applied... in all types of construction, lumber, petroleum, farm equipment, marine and machine tool applications... Twin Disc "know-how" has perfected a *proved* product to handle the job. TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).



Power Take-off



Machine Tool Clutch



Marine Gear

SPECIALISTS IN INDUSTRIAL CLUTCHES SINCE 1918

the customer extra charges, Hammond forgets about C.O.D. Instead, it sends along a brief explanatory letter with a coupon listing the repair charges (usually less than \$3, seldom more than \$5). The customer is merely asked to return the coupon with proper payment.

• **Big Savings**—The results have amazed even company officials. Out of 6,500 clocks handled on this open-account basis by mid-January, only 57 resulted in bad debts. The total was less than \$350. Against this Hammond saved (1) more than 600 sq. ft. of storage space; (2) the full time of two clerks handling correspondence and records; (3) hundreds of dollars for stationery and postage. There used to be 2,000 to 3,000 clocks awaiting repair. There are never more than 150 any more.

Now Hammond is handling its organ instruction books the same way. If the customer doesn't send along any money for the book (\$1 a copy) with his order, Hammond simply sends out the book along with a letter asking for payment.

Westinghouse Divorces Industrial, Home Goods

Westinghouse is going to give its consumer-products division closer control over the distribution of consumer goods.

Up to now, Westinghouse has distributed consumer products through a dual system, comprising (1) independent distributors, and (2) the Westinghouse Electric Supply Co., which also handles Westinghouse industrial apparatus and supplies. The WESCO part of this system is to be changed.

• **Factory Branches**—Physically, consumer products will still be warehoused at WESCO depots—but not by WESCO. Factory branches under the direct supervision of the consumer-products division will handle the operation. WESCO will confine itself to industrial products.

So far, the plan only applies to the middle Atlantic district. But presumably, if results are good, Westinghouse will apply it to the rest of the country. At no point, however, will it touch the company's established independent distributors.

• **Logical Step**—This splitup of functions is a logical step in a program Westinghouse began about a year ago. At that time, the company put its two consumer-products operations—household radio and home electrical appliances—under a new official, the vice-president in charge of consumer products. J. M. McKibben has that job. The new step will integrate further the operations of the new division.

VESSEL DIVISION

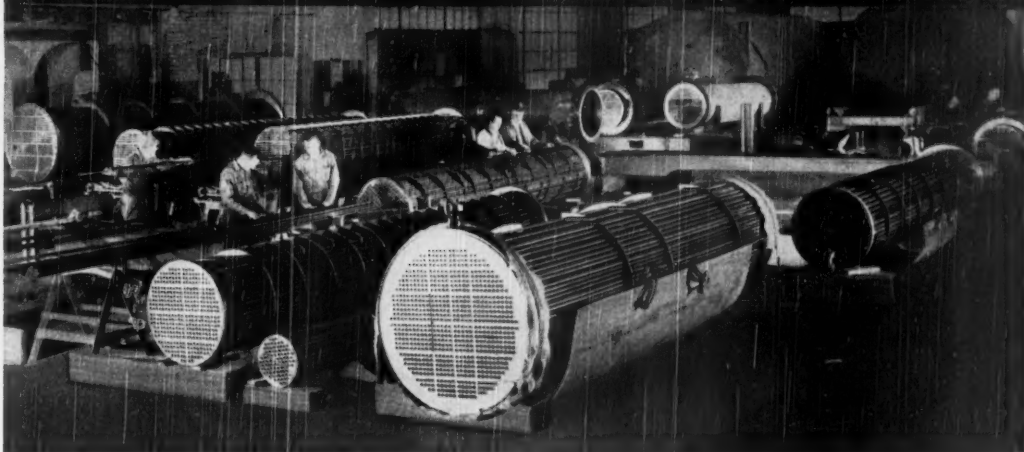
NEWS



A.O. Smith

CORPORATION

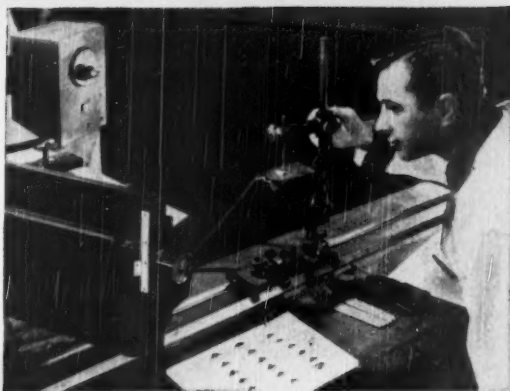
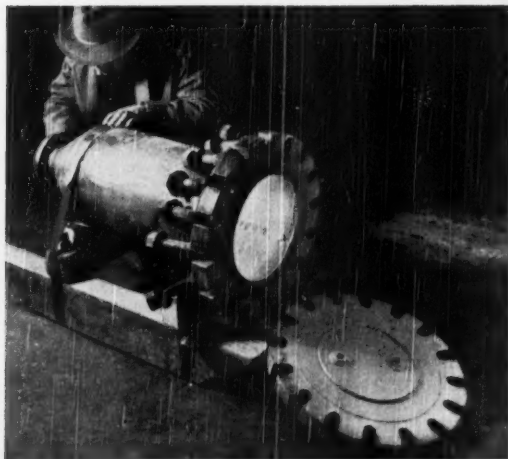
New York 17 • Boston 16 • Philadelphia 3 • Pittsburgh 19 • Chicago 4
Washington 6, D. C. • Atlanta 3 • Tulsa 3 • Dallas 1 • Houston 2
Seattle 1 • Los Angeles 14 • International Division: Milwaukee 1



NO JOB IS TOO BIG—OR TOO SMALL.

Heat exchangers for every service—large or small, hot or cold, high or low pressures—are engineered and built by A.O. Smith. Customers benefit from accumulated years of A.O. Smith experience in the use of a wide variety of materials.

NO PIG-IN-A-POKE HERE. The customer and A.O. Smith collaborated in the building of this SMITHway alloy-lined experimental pilot unit so that the alloy lining, selected by laboratory tests for corrosion service, could be subjected to process test-runs before the full-size production units were manufactured.



SAFEGUARDING THE CUSTOMER'S INVESTMENT.

After the selection of the alloy lining, A.O. Smith makes doubly sure that it conforms to specifications, and does not contain any undesirable residual elements, by spectro-chemically analyzing sample coupons of the lining before releasing it for manufacture into the vessel.

A. O. Smith Corporation, Dept. BW-350
Milwaukee 1, Wisconsin

Without obligation, send us the latest A. O. Smith Vessel Bulletins:

- ☐ V-46: Alloy, Alloy-lined, Clad and Glass-lined Vessels
- ☐ V-44: Field Assembly of Pressure Vessels
- ☐ V-52: Multi-Layer Manufacture and Assembly

Name

Firm

Street City State

CHRYSLER Airtemp

Air Conditioning brings
more summer customers

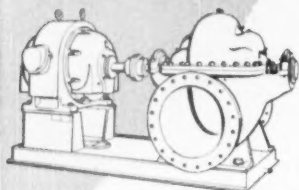


Chrysler Airtemp

AIR CONDITIONING • HEATING • REFRIGERATION
Airtemp Division of Chrysler Corporation
Dayton 1, Ohio
In Canada: Therm-O-Rite Products Ltd., Toronto

Economy Pumps

meet your needs!



• Whether it's extra large or very special, Economy will build for you the pump best suited to your specific needs. Service is fast . . . we're compactly organized with excellent production facilities. We're equipped to test in actual operation pumps to 30,000 G.P.M. Our engineers are fast and right with the answers to unusual pump problems.

Let's discuss your pump requirements.

Economy Pumps Inc.
Div. of Hamilton-Thomas Corp.
Hamilton, Ohio

THE MARKETING PATTERN

TIMES were tough on the little fellow back in the thirties when fair trade first saw the light of day. Whenever some hard-pressed merchant cut a sliver off prices, a full-scale price war started. Retail mortality was awful.

In such straits, fair trade looked like a delivering angel. By getting a floor under prices, the smaller merchants hoped for a reprieve from oblivion.

And they also hoped to get a reprieve from something else: newer forms of distribution. The thirties spawned the pine-board drug store, the mail-order retail outlet, the supermarket, more and more chain units. These all had something disturbing in common: cash-and-carry, price-cutting, fewer frills, as little credit-selling as possible, as little service as possible. But, figured the smaller merchants, if you take away the price advantage from these newcomers, you have ruined them.

It didn't quite work out that way, but at any rate the fair-trade laws spread from one end of the nation to the other.

Today, about a decade later, there is growing evidence that some segments of retaildom are getting awfully itchy to put the whole fair-trade problem to a test again—from the opposite direction. Here's the background of this restlessness:

National income is high and sales are good, but more than ever the bigger merchants want price freedom. For one thing, consumers are now able to shop around again for bargains. For another, everybody is deathly afraid of inventories. For a third, everybody wants volume.

Inventory and volume problems to some degree go along hand-in-hand. Retailing costs currently are high, and goods that don't sell mop up working capital that could be used to carry goods that do. It's better to move them—even at little or no profit—and replace them with stuff that will bring in real money.

Big stores claim that smaller merchants are able to solve this triple headache very simply: They whack 10% to 20% off fair-trade prices. This is particularly true in hard goods. What's more, the little fellow can get away with it. He doesn't advertise much. He is ob-

scure. So who is there to police him?

On top of that, the "discount house"—specialist in knocking 20% off—is back on the scene. It cuts fair-trade corners faster than anybody.

IN the face of this competition, the big stores complain that they are almost helpless. If they cut prices, everybody knows about it. If they stick to fair-trade lists, they are strapped. So, they argue, they are becoming mere showrooms where consumers look over the merchandise only to buy it elsewhere cheaper.

Impatience to get out of this box is mounting. The most recent example is R. H. Macy & Co.'s sneer at fair-trade pricing in New York (BW—Mar. 18 '50, p. 100). Macy's has cut beneath fair-trade minimums on quite a list of nationally advertised small appliances. And thus far, the store is getting away with it. The manufacturers whose merchandise is being sold below fair trade have done little more than rumble. Meantime other big stores are getting on Macy's bandwagon—also without reprisals.

THE next few weeks will probably shed more light on the question of where fair-trade pricing fits into a healthy, high-level economy.

Of course, the question could simply be settled by default. That is, the manufacturers could ignore the whole thing. That would give Macy's its price-elasticity, and so long as other merchants didn't howl, things would move along willy-nilly.

On the other hand, can Macy's afford to sell at below-fair-trade prices forever? The manufacturer's price to Macy's is set with a fair-trade resale price in mind. So what Macy's currently is doing is cutting into its own profits. Thus what Macy's must really want is either (1) to have the New York fair-trade law formally tested, or (2) have appliance manufacturers discontinue fair trade altogether so that prices are elastic at all levels even though the law stays on the books.

MARKETING BRIEFS

Hotel occupancy in January was 80% of available rooms. Last year the figure was 83%, say Horwath & Horwath, hotel accountants. In January, 1947, it stood at 90%.

Prize contests in taprooms, hotels, and restaurants that have Pennsylvania liquor licenses are taboo from now on. The state's liquor control board aimed its order at pool, bowling, and pinball machine "leagues" organized by the licensees.

Furniture-store sales in February beat the same 1949 month by 9%. The National Retail Furniture Assn. also figures that inventories were 7% lower than a year ago.

Regional grocery chains in the South have started a fast drive for more business. Latest chain promotion: Colonial Stores, Inc., is sponsoring a \$30,000 cash scholarship contest. The only requirement is that entries be made on official blanks obtained in a Colonial store.

The Cocktail Party, T. S. Eliot's Broadway hit, has been recorded in its entirety by Decca Records. This is the first time a nonmusical play has been sold on records through trade channels, says Decca, and it's a "frank experiment." Among the interested bystanders: Harcourt, Brace & Co., which is marketing the play in book form, in competition with the recordings.

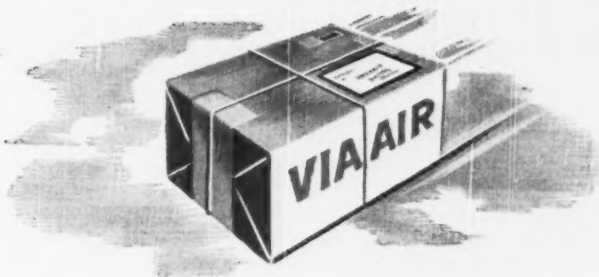
Sporting goods stores are putting more stress on credit sales, says the trade magazine, Sporting Goods Dealer. Now 62.5% of them have easy-pay plans. Another 10% has such plans under consideration.

Wholesalers' sales dipped 2% in January from the preceding month, after seasonal adjustment. Durable goods dropped 7% (although electrical goods were up 3%). Nondurables inched up 1%.

Household-washer sales zoomed in January. American Home Laundry Mfrs. Assn. says that its members sold 60% more washers this year than in January, 1949.

Sunday night viewers are heavy on the over-35-year-old side during the early evening. But by 10 p.m., says researcher Daniel Starch, the audience is about 50-50 on either side of the 35-year mark.

The air is yours use it



TO DELIVER YOUR GOODS IN A-1 CONDITION

MORE and more shippers of breakable merchandise are discovering that it pays to ship their goods by air. The speed and careful handling of Air Freight, Air Express and Air Parcel Post save packing cost and virtually eliminate breakage. A manufacturer of television tubes, for



instance, recently used the air to cut down in-transit damage from 15% to zero. If your goods are marked "Handle With Care," ask any airline to tell you more.

United Aircraft CORPORATION

EAST HARTFORD, CONNECTICUT

MAKERS OF PRATT & WHITNEY ENGINES, HAMILTON STANDARD PROPELLERS, CHANCE VUGHT AIRCRAFT AND SIKORSKY HELICOPTERS FOR THE U. S. ARMED FORCES AND THE FINEST AIRLINES IN THE WORLD.

DON'T LET HIM BLACKJACK YOUR BUSINESS!



Crooks and dishonest employees may not put you *out* of business, but they can put a dent in your *profits* that will stay there a long time.

A few of your company checks (or even one, in fact) with raised amount line can cost you plenty! Only last year over \$400,000,000 were stolen by check-raisers and forgers.

It CAN happen to you...unless you protect the amounts on your checks against fraudulent alteration with the Todd Protectograph Checkwriter—the improved checkwriting machine that indelibly shreds amount lines into your checks...provides locked control...carries non-cancellable insurance that covers losses from alteration, and forgery of signature or endorsement!

Take the simple step of finding out *now* how the Todd Protectograph Checkwriter can safeguard your business funds. Just clip and mail the coupon for full information *today*.

**PROTECTS MORE
THAN THE AMOUNTS
OF YOUR CHECKS!**



Todd
COMPANY, INC.

ROCHESTER NEW YORK
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BW 3-25-50

READERS REPORT:

Rubber Man on ITO

Sirs:

I have read with interest the editorial "The ITO Charter Should Be Ratified" [BW—Feb. 25 '50, p136], noting the statement, "After careful study we line up with those who are supporting the charter."

Provisions of the Havana Charter, such as those relating to the maintenance of "full and productive employment," could license the Keynesian political philosophers and planners throughout the world to promote a system of interlocking controlled economies, with consequent loss of freedoms, competition, and incentive. It seems to me that such a course would lead to State socialism and the sharing of poverty.

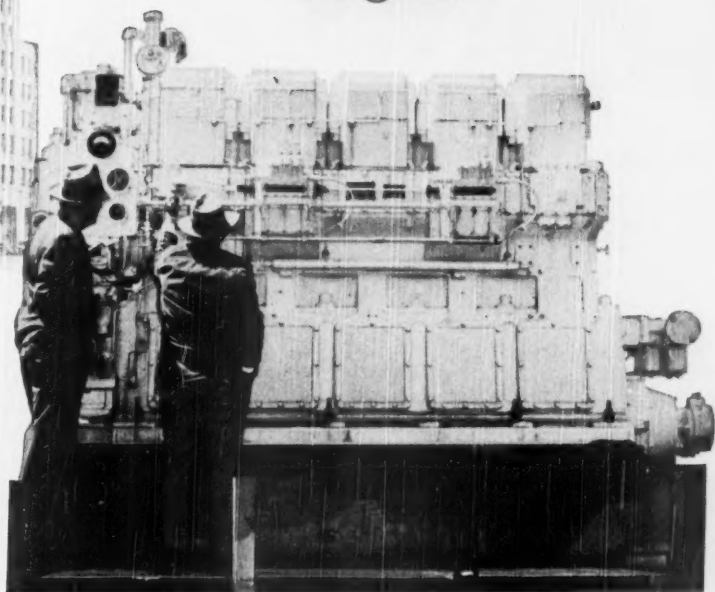
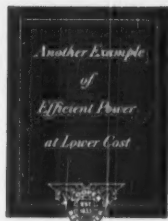
The stated objectives of the Havana Charter include increased production, consumption, and exchange of goods to contribute to a balanced and expanded world economy; the reduction of tariffs and other trade barriers on a mutually advantageous reciprocal basis; and the elimination of discretionary treatment in international commerce. The Reciprocal Trade Agreements now in effect were designed to accomplish these objectives of the Havana Charter and are currently a part of our foreign policy.

The rubber industry has probably had more opportunity than any other American industry for first-hand observations of the stultifying effects of commodity agreements formed by groups of foreign governments in the crude rubber field. Therefore you may be interested in having certain of my views on this important question.

It is my opinion that provisions of the Havana Charter relating to inter-governmental commodity agreements would serve to encourage the formation of cartels, restricting rather than expanding trade and lessening competitive enterprise. These agreements could be a dangerous step toward cartelization of prices under government auspices.

Under the rubber cartels of the past, production was restricted, prices raised, and the normal expansion of rubber consumption retarded. For the United States to ratify the ITO Charter would, in our judgement, countenance formation of similar commodity agreements and would not be in the best interests of our economy or of the American people.

I believe that nearly all companies in the rubber manufacturing industry



Hot idea in power keeps buildings cool at lower cost!

The two buildings shown here are the Dallas headquarters of the Lone Star Gas Company. Cooper-Bessemer engines, driving generators, provide power and light for both buildings . . . and have for years.

However, recent installation of year 'round air conditioning necessitated additional power. Like many other power users, Lone Star Gas checked into the advantages and economy of Cooper-Bessemer gas-diesels . . . then installed two of these new-type engines to take care of the increased power load.

Cooper-Bessemer gas-diesels are proving to be a "hot" idea in power if there ever was one. Since they run at *full diesel efficiency* on inexpensive gas, or oil, or any combination of the two, it is possible at all times to gain maximum fuel economy by using gas fuel to the limit of its availability. The savings are great! And there's no risk of shutdown even if the gas supply fails.

This is one of many recent Cooper-Bessemer diesel

and gas engine developments that are revolutionizing the cost of power in many fields. If you have a stake in power, stationary, marine or locomotive, be sure to find out about the *new* things being done by one of America's *oldest* engine builders.

The
Cooper-Bessemer
Corporation

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• Houston • Dallas • Odessa • Seattle • Tulsa • St. Louis • Gloucester •
New Orleans • Shreveport

DIESELS • GAS ENGINES • GAS DIESELS • ENGINE-DRIVEN AND MOTOR-DRIVEN COMPRESSORS • HIGH PRESSURE LIQUID PUMPS

East and Midwest, 2 modern ALCOA PLANTS MAKE the best ALUMINUM DIE CASTINGS YOU can buy



for example . . .

Alcoa die castings were on the jalopies of 1919 and are on the modern cars of today. Alcoa gets the jobs because Alcoa is a leading producer of sound, on-grade castings . . . is your most dependable source for *aluminum* die castings.

Let our 35 years of die casting know-how and 62 years of aluminum experience help to lower your costs, too. For a prompt quotation, call your local Alcoa sales office, or write: ALUMINUM COMPANY OF AMERICA, 1908Q Gulf Bldg., Pittsburgh 19, Pa.

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more positive protection from fire loss with VIKING SPRINKLER SYSTEMS

On guard night and day, Viking Sprinkler Systems, like a crew of firemen, take immediate action against fire for you. Viking has engineered so completely that even the factor of "human failure" is prevented from interfering in protecting you from liability and loss due to fire.

Viking's unexcelled reputation as the developer of new methods and the improver of old methods of fire control offers you the last word in dependable, efficient protection. In addition, Viking Sprinkler Systems offer the tangible benefit of amortizing their initial cost quickly through reduced insurance rates.

Viking engineers for all types of hazards and installations. A conveniently located engineer will survey your requirements without obligation. Write for free bulletin.



SPRINKLER SYSTEMS

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THE VIKING CORPORATION

HASTINGS, MICHIGAN

of our country share the views which are expressed in this letter.

JOHN L. COLLYER

PRESIDENT,
THE B. F. GOODRICH CO.,
AKRON, OHIO.

• The ITO Charter is a tremendously important issue—and BUSINESS WEEK readers have recognized it as such. Some letters reflect Mr. Collyer's views, others take a strong stand for the charter.

Geography Trouble

Sirs:

In the article "Seattle Sea Fair" [BW—Feb.18'50,p80] you compare a forthcoming event in Seattle with the New Orleans Mardi Gras and the "Minneapolis" Winter Carnival. This is inaccurate. You mean the famed St. Paul Winter Carnival, which had its beginnings in St. Paul in 1886 and has been held here annually.

The St. Paul Winter Carnival is a tremendous event. The editors of BUSINESS WEEK should know more about it before placing it in another city.

FRANK L. MADDEN

SAINTPAULITES, INC.,
ST. PAUL, MINN.

Sirs:

The Los Angeles Harbor Dept. and other interests were somewhat perturbed over your article "Punching a Hole in the Hills" [BW—Feb.18'50,p81]. You refer to the "Los Angeles port at Long Beach."

The Port of Los Angeles is not a part of Long Beach. The Port is composed of three districts: Outer Harbor, San Pedro, and Wilmington. All are incorporated within the City of Los Angeles. Long Beach is some six miles east.

CLANCY DAYHOFF

DIRECTOR OF PUBLIC RELATIONS,
PORT OF LOS ANGELES, CALIF.

Sirs:

We congratulate BUSINESS WEEK on the fine article "The New Face of U. S. Industry" [BW—Feb.25'50,p55]. You have brought to the public's attention what amounts virtually to a revolution in industrial building design.

But we regret to have to point out that you erred in locating in Plainfield, N. J., rather than West Mifflin Borough, Pittsburgh, Pa., the 17-acre plant we designed and are constructing for the Continental Can Co.

C. B. WIGTON

PRESIDENT, WIGTON-ABBOTT CORP.,
PLAINFIELD, N. J.

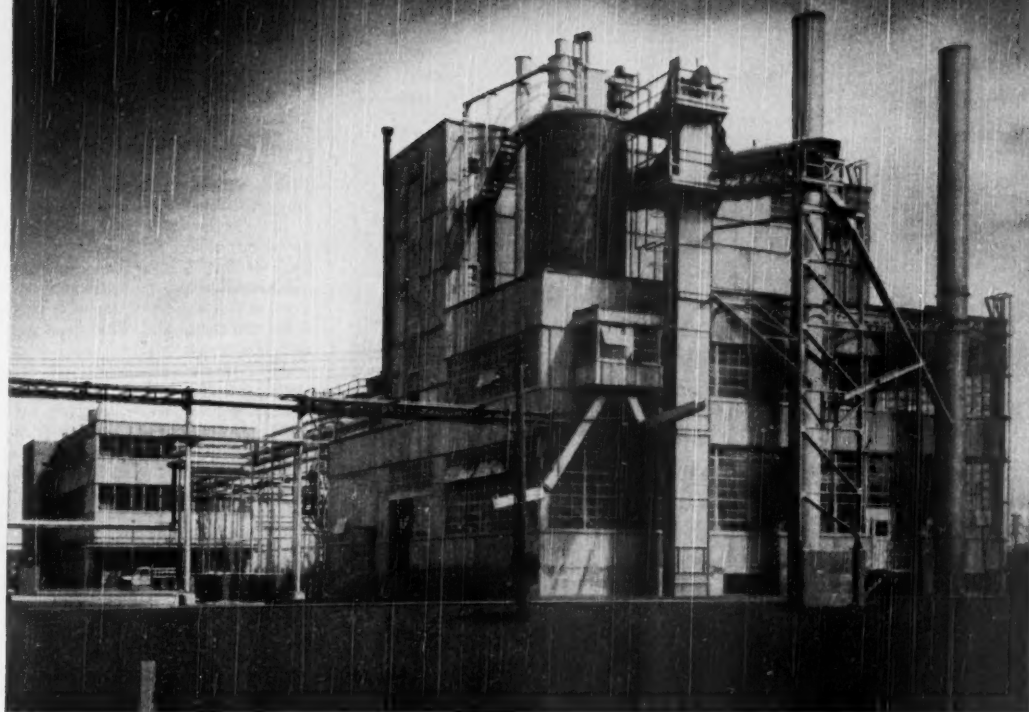
Concrete Squeeze

Sirs:

Your article "In a Squeeze—Concrete Is Stronger" [BW—Mar.4'50,p52] is an excellent analysis, in lan-

B. F. Goodrich Chemical Company

NEW AVON LAKE PLANT



Once an idea in a test-tube...

now in **Mass Production**



*Works speak louder
than words*

GAS PROCESSES DIVISION

THE GIRDLER CORPORATION

LOUISVILLE 1, KENTUCKY

Designers, Engineers and Constructors

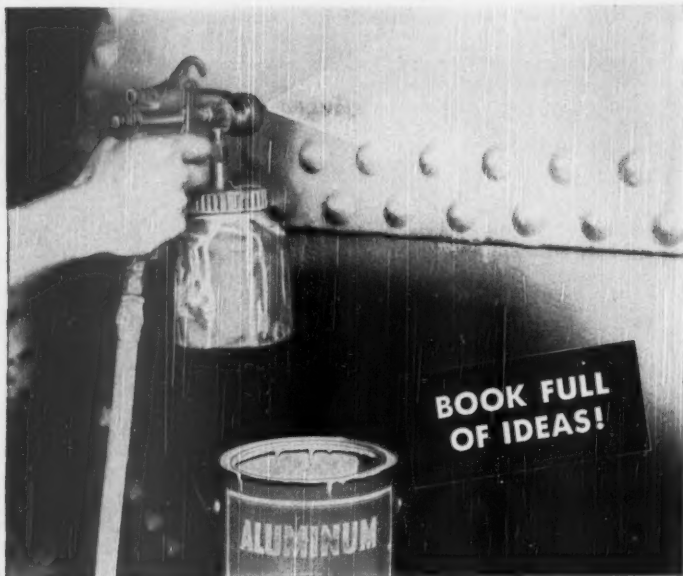
OUTPUT OF THE PLASTICS INDUSTRIES is soaring upward year after year.

To keep up with the ever-increasing demand for plasticizers for vinyl, other resins and nitrile rubber, B. F. Goodrich Chemical Company engineers worked out a basic idea for a new process.

It was only natural that they called in Girdler engineers, because these experienced men specialize in converting basic process developments into mass production facilities.

The above modern multi-purpose chemical plant, located at Avon Lake, Ohio, is the result. It was designed, engineered and constructed by Girdler, with the teamwork of the B. F. Goodrich Chemical Company.

On engineering-construction problems requiring efficient facilities to produce, purify or use chemical process gases, liquid or gaseous hydrocarbons, or organic compounds... get in touch with Girdler. Write for further information on this service.



HOW TO GET MORE PROTECTION FOR METAL SURFACES...INSIDE OR OUT*

THIS NEW FREE BOOK tells how! Contains important information on proper application, paint selection and the high resistance of aluminum paints to moisture, fumes, heat and wear. Alcoa does not make aluminum paint, but we have prepared this book to help you buy and apply it right.

If you've been buying paint without the information this book contains; if you've never used the superlative aluminum paints it describes—your paint knowledge is out of date. This book tells how to get the best aluminum paint and apply it for greatest service. Includes coverage tables, facts on correct types of ready-mixed aluminum paints for metal, masonry, or wood surfaces, inside or out—and for heated surfaces. Answers many important painting questions.

This important buying and application information will be sent by return mail.



MAIL THIS COUPON TODAY!



Look for this shield on aluminum paints made by many paint manufacturers using ALCOA PIGMENTS.

*The RIGHT aluminum paint for this job is ALUMINUM METAL & MASONRY PAINT.

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Paint Service Bureau, 1742C Gulf Bldg.,
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guage easily understood by the layman, of the engineering principles and practical advantages of prestressed concrete. There is an error in the article, however, which we would like to point out.

The pictures accompanying the article purport to show the method used in "Roebbling's prestress system." These photos were taken on the site of the Walnut Lane Bridge, now under construction in Philadelphia. Actually they depict the Magnel-Blaton system, not Roebbling's. The Preload Corp. of New York is building the prestressed members of this bridge, and is the exclusive U.S. licensee of the Magnel-Blaton system, in association with Professor Gustave Magnel of Belgium.

In October, 1949, a girder identical to those which will form the main span of the Walnut Lane Bridge was deliberately tested to destruction by the Preload Corp. The results were particularly successful and were reported in *BUSINESS WEEK* [BW—Nov. 12 '49, p. 84].

Most articles on the subject of prestressing today tend to emphasize linear prestressing—a process that was for the most part developed in Europe. It might be of interest to your readers to note that American engineers have developed methods by which large circular structures—tanks, silos, etc.—have been built in this country, using the principles of prestressed concrete design.

CURZON DOBELL

VICE-PRESIDENT, PRELOAD CORP.,
NEW YORK, N. Y.

Coal Trust?

Sirs:

In the *Washington Outlook* [BW—Feb. 18 '50, p. 16] you state "It would be a violation of the antitrust laws for the mine operators to get together and regulate production to keep prices firm." In view of the decision of the U.S. Supreme Court in the *Appalachian Coal, Inc.*, case (1933), I am wondering if the above statement is entirely correct. The decision did authorize a cooperative plan among 137 producers to market coal through the organization of an exclusive selling agency, which had the incidental effect of regulating market prices. Joint control by all producers was not authorized.

HAROLD L. SCHILZ

WASHINGTON, D. C.

• *BUSINESS WEEK* thinks such an arrangement would be an antitrust violation. In 1933, the court said the exclusive marketing deal was not monopolistic, but it reserved the right to look into it at any time if it moved across the border of illegality. The court didn't choose to knock down the arrangement at the time, and the antitrusters have kept hands off the industry—for a lot of reasons.



How CROSLEY "Traded-In" *Speed Nut Savings* for Better Shelvador® Design

The 1950 Shelvador has been dressed up for even greater "buy-appeal" in 1950.

Crosley Division of AVCO Manufacturing Corporation has replaced riveted aluminum shelves with streamlined, gleaming plastic attached with Push-On SPEED NUTS—at no extra cost!

The assembly is now done by hand rather than machine, and the higher unit cost of the im-

proved shelves is completely offset by a 49 percent *SPEED NUT savings*.

You, too, can capitalize on savings from SPEED NUT brand fasteners. Ask your Tinnerman representative for details. Also write for booklet, "SPEED NUT Savings Stories". Tinnerman Products, Inc., 2040 Fulton Road, Cleveland 13, O. In Canada: Dominion Fasteners Limited, Hamilton.

PREVIOUS METHOD—Two-piece aluminum shelves assembled with four rivets. Disadvantages: Conspicuous rivet heads; machine assembly; extra material handling.

NEW METHOD—Plastic shelves with integral studs fastened with six Push-On SPEED NUTS. Advantages: SPEED NUTS concealed; hand assembly; less material handling. Three smaller Push-Ons hold name plate, two tubular SPEED CLIPS attach shelf identification plates. Entire Shelvador section assembled with 45 SPEED NUTS in all.

TINNERMAN *Speed Nuts*

FASTENERS • TUBULAR CLIPS • SPEED NUTS

The advertisement features a large illustration comparing two methods of assembling Shelvador shelves. On the left, the "PREVIOUS METHOD" shows a two-piece aluminum shelf assembly with four rivets, which are visible as heads on the surface. On the right, the "NEW METHOD" shows a plastic shelf assembly with integral studs fastened with six Push-On SPEED NUTS, which are concealed. The new method also includes three smaller Push-Ons for a name plate and two tubular SPEED CLIPS for shelf identification plates. The entire Shelvador section is assembled with 45 SPEED NUTS in all. The background of the illustration is decorated with various fastener icons. At the bottom, the Tinnerman logo and "Speed Nuts" brand name are prominently displayed, along with a list of products: FASTENERS, TUBULAR CLIPS, and SPEED NUTS.

up here

they know

P&H

*the sign of
Added Values*

See that flash? It gives you news. It says they're building *this* bridge the modern way. Faster. Lighter. Stronger. They're welding it, just as they're welding more and more of the things you use . . . and the machines that make them.

With each development that is added to make welding better, *you* benefit. And many of these developments . . . these *Added Values* . . . are labeled **P&H**

WELDING MACHINES . . . now operated with one simple control, a P&H development. WELDING ELECTRODES . . . P&H has created scores of them to fit all requirements. WELDING POSITIONERS . . . P&H invented them. PRODUCTION WELDING CONTROL SYSTEMS . . . exclusive with P&H.

This only *begins* the story of America's most complete line of arc welding equipment. As with all P&H products, it's a story of *Added Values* . . . of the Quality and Service which have made P&H a leader since 1884.

P&H

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Milwaukee 14, Wis.

QUALITY
FOUNDED IN 1884
SERVICE

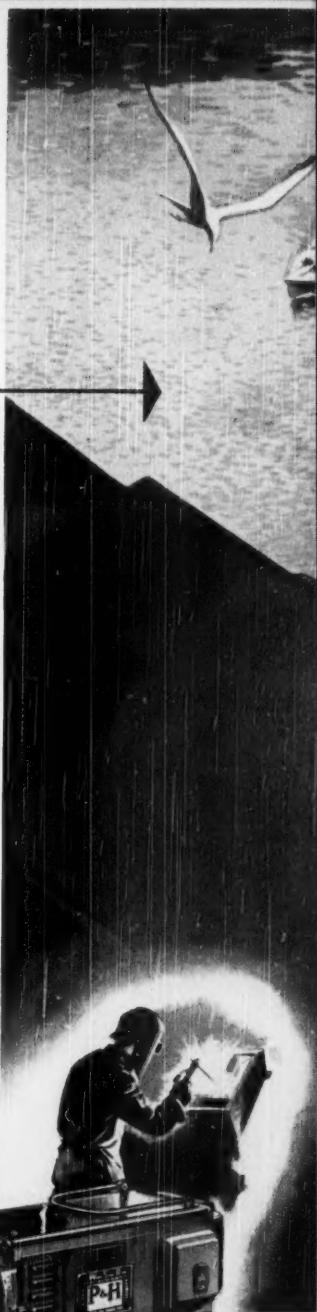


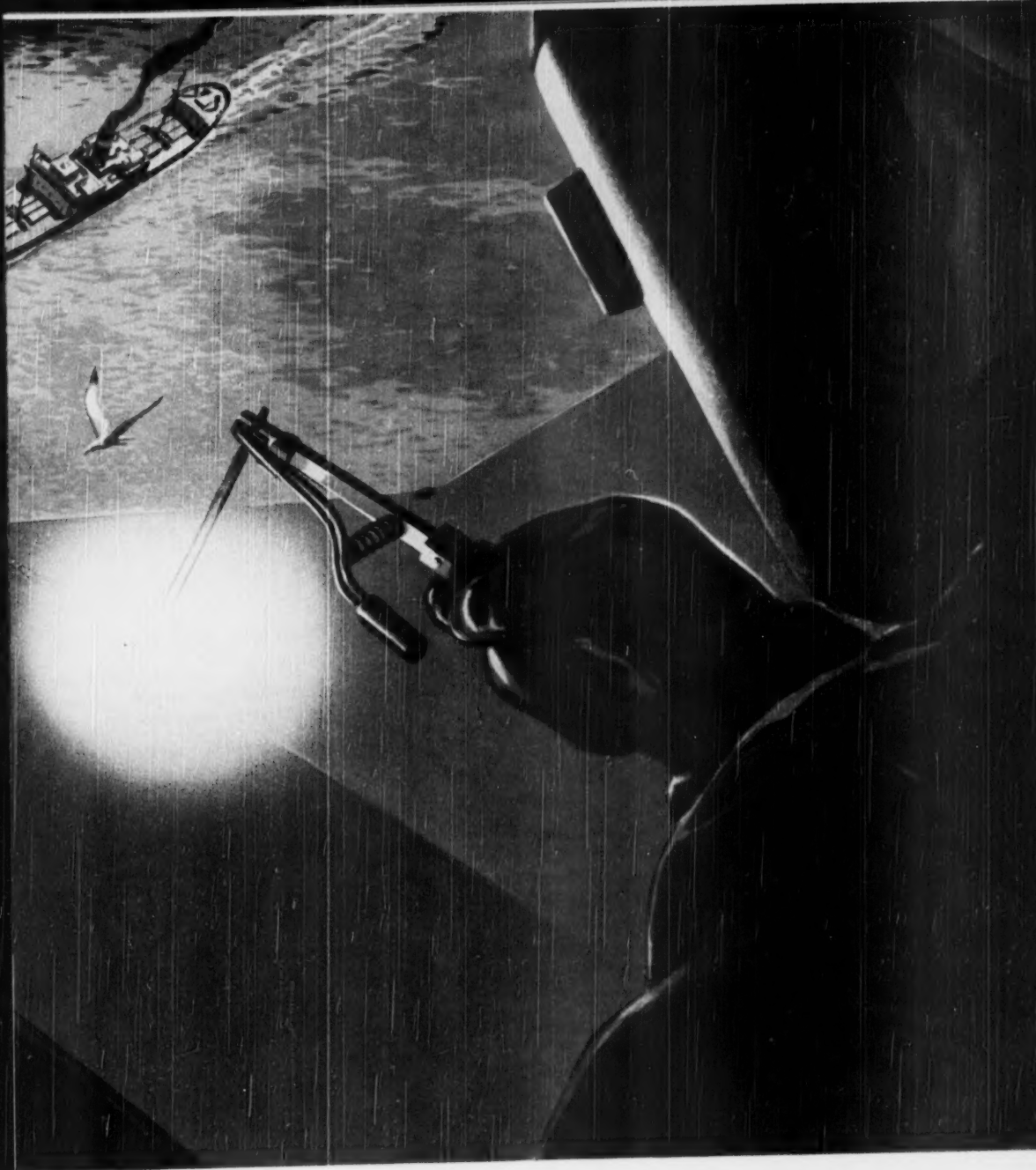
SOIL STABILIZERS



DIESEL ENGINES

ELEC

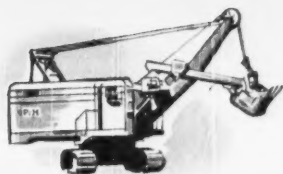




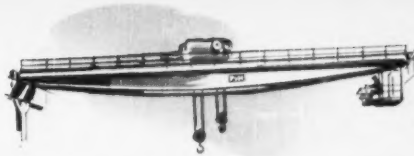
NG



C HOISTS



POWER SHOVELS



OVERHEAD CRANES



HOMES



MORE

**Natural
Rubber**

MEANS

**Better
Tires**

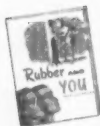
Natural rubber is more *elastic*
—more *flexible*.

Natural rubber treads
skid less on snow and ice.

Natural rubber tires
save on gasoline
consumption because of
less road resistance.

Natural Rubber

Nature and Science Serving Mankind



Write for Free Booklet—"Rubber and You". You'll like to have a copy of this interesting picture story of natural rubber—how it is grown and how it is made into hundreds of products that serve modern man. Write for your free copy to Dept. 606, NATURAL RUBBER BUREAU, 1651 K St., N.W., Washington 6, D. C.

Natural Rubber Bureau 1651 K St., N.W., Washington 6, D.C.



NATURAL RUBBER COMES FROM HERE
From Southeast Asia comes over 90% of all the natural rubber in the world. Over half of it is produced on small one-family rubber farms of a few acres. The other half comes from larger plantings called "estates".



PEST CONTROL IN RUBBER ORCHARD
Rubber growers in Malaya use modern methods of spraying insecticides on leaves of rubber trees. Research centers assist planters in developing healthy, high-yielding trees.



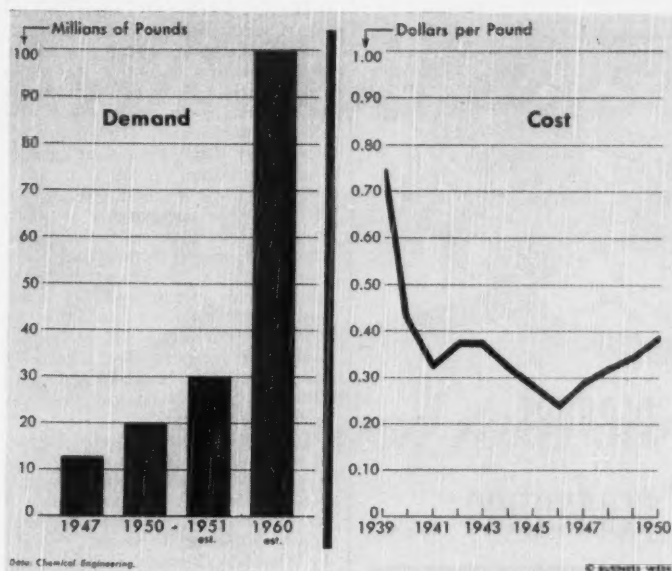
SOIL TESTS AID RUBBER GROWERS
Science is constantly at work in Malaya helping farmers to produce more and better natural rubber. Here a research technician tests soil to determine the degree of acidity.



PATROLLING A PLANTATION
To protect rubber growers from roving Communist-led gangs of bandits, Flying Squads such as this must maintain a constant vigil on more isolated plantations in Malaya.

NATURAL RUBBER MEANS BETTER QUALITY AND LOWER PRICES IN HUNDREDS OF RUBBER PRODUCTS — FROM BABY NIPPLES TO GIANT TRUCK TIRES

PRODUCTION



ACRYLONITRILE is selling well, will do better in the future. Production cost problems have been pretty well licked, but prices are working upward.

Chemical Market: New Textiles

Three new synthetic fibers—Orlon, Dynel, Chemstrand—use lots of acrylonitrile, will soon use plenty more. It's an organic compound first produced commercially just before the war.

Synthetic textile fibers are rapidly building up to a big boom for part of the chemical industry. Nylon started this special boom back before the war. Now a whole string of new fibers are in the works, and they all use the same chemical compound: acrylonitrile.

Acrylonitrile, the chemist's name for vinyl cyanide, is a transparent, colorless liquid made from ethylene chloride and hydrogen cyanide. Before the war, there was little demand for it, although American Cyanamid Co. produced it in small quantities on a commercial basis.

When the wartime synthetic rubber program began, acrylonitrile was used with butadiene to make a special-purpose nitrile rubber. Some even went into rubber used for tires. Rohm & Haas produced about 6-million lb. a year during the war and then quit. Du Pont set up a pilot plant in 1942 and turned out around 200,000 lb., but so far it hasn't made any move to go back into the business.

• **Peak Production**—This week, Chemical Engineering, a McGraw-Hill publi-

cation, reported that acrylonitrile production has bounced back up and is going better than ever, that it is now exceeding 27-million lb. a year—all coming from American Cyanamid. The report predicted that within 10 years, annual output will be running around 100-million lb., maybe even higher. That sounds like a pretty big jump, but it all hangs on the development of synthetic textile fibers such as Orlon, Dynel, and Chemstrand, which use it as their raw material.

Orlon is probably the best known of the three (BW—Aug. 28 '48, p. 20). It's being talked about in even rosier terms than nylon. It can be used for most types of clothing, for industrial purposes—bags, etc.—and it withstands sunlight and weather better than nylon. Besides, it is flexible, resistant to mildew, and doesn't absorb moisture readily.

Du Pont is turning it out in a pilot plant at Waynesboro, Va. A full-scale commercial plant is going up at Camden, S. C., and will begin operating

55% of the U.S.
Population...
Within 500 Miles



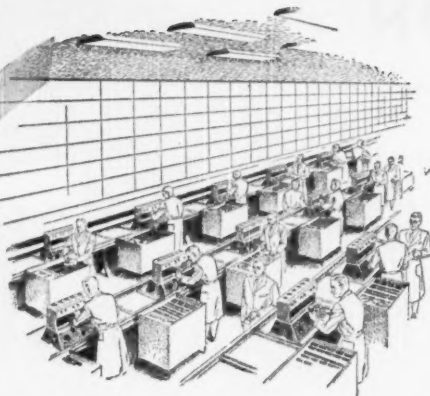
"Accessible isolation"—so important to industry today—is yours in North Carolina, No. 1 State and market of the South.

Uncrowded industrial sites with ample dispersed labor supply—both rural and urban—are plentiful... within overnight reach of the great markets of the east and midwest. Many raw materials are available at their source... a wealth of water and power... a year-round out-of-doors climate.

Superb highways connect a rural road network... with excellent rail, motor, air and marine shipping facilities... all in the State with the most people having the most money to spend in the South... where income increase has exceeded the national average for more than a decade.

To get the facts from the State that offers you "Relative Isolation With Maximum Accessibility to Major Markets" address: Dept. B-4, Division of Commerce and Industry, Dept. of Conservation and Development, Raleigh.





Better product... better production

Roebbing Aircord contributes to safe, sure control in the air.

Roebbing Oil-Tempered Spring Wire leads for automotive springs.

Roebbing Magnet Wire insulation is 10 to 40 times tougher than other types.

WHEREVER HIGH CARBON WIRE can improve the quality of a manufactured product, Roebbling wire can be adopted with complete confidence in results. Roebbling is one of the world's largest producers of quality Oil-Tempered Spring Wires and Cold Rolled Spring Steels... furnishes wire with physical properties and finishes for almost every purpose under the sun.

But besides bettering your product, Roebbling round, flat and shaped wires, bring you better production, too. Every inch of these wires is identical in gauge, grain and finish. Your machine preparation time is lowered; machine stoppages and rejects cut way down... Roebbling research, special techniques and modern, precision equipment assure wires with definite *plus* values for every user.

THAT'S WHY...

Today it's *Roebbling!*

JOHN A. ROEBLING'S SONS CO., TRENTON 2, NEW JERSEY
Atlanta, 934 Avon Ave. • Boston, 51 Sleeper St. • Chicago, 5525 W. Roosevelt Road • Cincinnati, 2933 Fredonia Ave. • Cleveland, 701 St. Clair Ave., N.E. • Denver, 4801 Jackson St. • Houston, 6216 Navigation Blvd. • Los Angeles, 216 S. Alameda St. • New York, 19 Rector St. • Philadelphia, 12 S. Twelfth St. • Portland, 1032 N.W. 14th Ave. • San Francisco, 1740 Seventeenth St. • Seattle, 900 First Ave. S.

A CENTURY OF CONFIDENCE



next summer at an annual rate of 6-million lb. of fiber. Du Pont's total development costs on the project will run close to \$22-million.

Dynel, a product of Carbide & Carbon Chemical Corp., is another synthetic textile fiber with big possibilities for the clothing industry. Its whole name is acrylonitrile-vinyl chloride copolymer, and it used to be called Vinylon N. commercially. Carbide & Carbon is busy setting up a plant for it at South Charleston, W. Va.

Dynel's fibers are short, give a staple effect (like the fuzzy quality of wool), so it may have more widespread applications for heavy clothing than any other synthetic. Besides, this quality will probably give it wide use in industrial fabrics for bags, screening, filter cloth. Production will begin next June, but it is expected that it probably will be some time before all of Dynel's commercial applications can be determined.

Chemstrand, the third of the group of new fibers, is also the farthest from commercial production. That's largely because nobody is sure exactly what it can be used for. Chemstrand Corp., which developed it, is owned jointly by Monsanto Chemical Co. and American Viscose Corp. At the present time, however, Chemstrand is only doing laboratory work on this acrylonitrile-derived fiber.

American Cyanamid is continuing research on acrylonitrile and its fiber derivatives at the company's development lab in Stamford, Conn. Since Cyanamid is the only producer of this material now and probably will continue as its major maker after others get into the business, any new uses it can come up with will boost its own market.

• **Competition**—It's likely, however, that other chemical producers will get into acrylonitrile soon. In the past, outfits such as du Pont and Carbide & Carbon have always been quick to become producers of their own raw material. But that probably won't happen until more commercial applications for the product are developed.

But one thing is pretty certain: If Orlon or any of the other fibers develop a lot of commercial applications in a hurry, Cyanamid will have to boost its own facilities for producing acrylonitrile. Others won't be in production in time if there is a sudden demand boost. And some optimistic forecasters set the demand figure at 300-million lb. annually by 1960.

Production costs will have a lot to do with it, too. They have continued downward at a fairly steady rate from its beginning in 1939 (chart), although raw-material price boosts have pushed them up again a bit in the last couple of years.

*All this noise!
— I can't take it!*

*Then take our advice!
... install a
FIBRETONE* Ceiling!*



You'll be surprised how little it costs to reduce disturbing noise and increase productive efficiency. Let our acoustical engineers convince you with an estimate...

Thousands and thousands of "noise traps" to help *end* harmful noise—that's the secret of Fibretone*, one of several types of Johns-Manville Acoustical Ceilings.

Each 12"-square unit contains hundreds of small cylindrical holes drilled in the sound-absorbing material. As sound waves strike the ceiling, they enter the "noise traps" where the sound energy is dissipated.

Fibretone is pre-decorated, attractive in appearance, can be painted and re-painted, and is designed to meet the most modest budget. Available with coating of flame-proof paint if desired.

Other J-M Acoustical Ceilings include Transite*, made of fireproof asbestos; and Sanacoustic*, perforated metal panels backed up with a fireproof, sound-absorbing element.

Whatever your noise problem, and whatever the type of interior, there's a Johns-Manville acoustical material that is *exactly right* to give you the best in sound control.

You'll be under no obligation to let us answer two executive questions: "What will the job cost?" "How soon can you do it?" For a prompt estimate, or free book on "Sound Control," write today to Johns-Manville, Box 290, New York 16, N. Y. *Reg. U. S. Pat. Off.



J-M Fibretone Acoustical Ceilings are easily installed over new or existing construction.



Johns-Manville

Asbestos Movable Walls—Terraflex and Asphalt Tile Floors—Corrugated Transite*—Flexstone* Built-Up Roofs—Acoustical Materials—Etc.

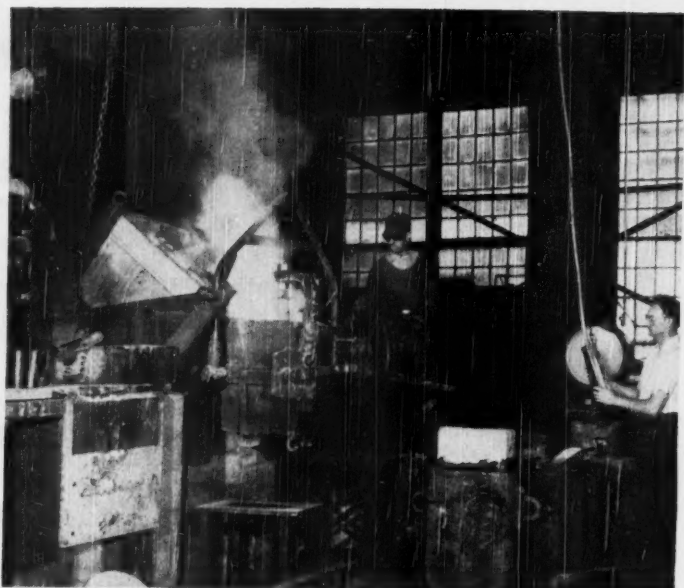
Pittsburgh Chain-Link Fence

For complete protection of your property and equipment consult our chain-link fence experts. They will plan an economical installation and give you a free cost estimate. Write today!

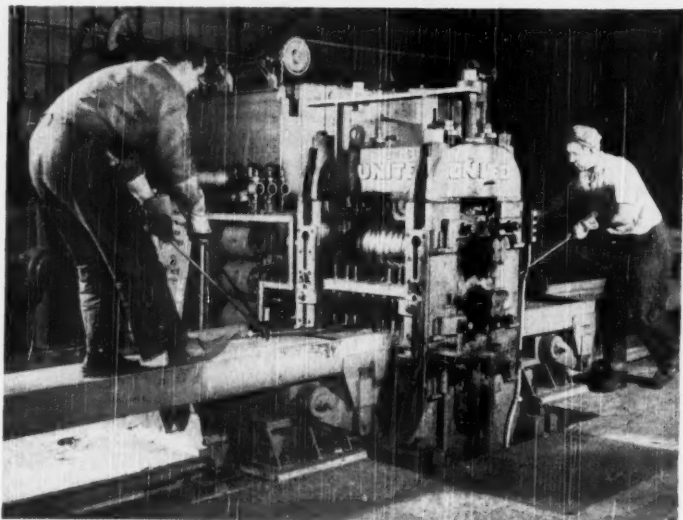


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Nowhere will you find such a concentration of expert business services—from advertising and banking to consulting engineers and research laboratories—as in New York State. For detailed information, write: New York State Dept. of Commerce, Room 199, 112 State St., Albany 7, N. Y.



MOLTEN METAL for jet-turbine parts is alloyed in this induction furnace. Radio-frequency currents pass around the furnace to bring alloys up to melting temperatures.



ROLLING MILL squeezes red-hot billets into bars. Bars are heat-treated to improve hardness. During rolling poor-quality heats are weeded out.

Midget Mill Makes Alloys for Jets

Westinghouse makes heat-resistant metals in its alloy lab for use in jet hot-spots, the turbine rotors, blades, and bolts.

Most metals start to flow at cherry-red heats, but alloys for jet-turbine parts must stand up and take it. Parts that take an extra rough beating are

turbine rotors, blades inside the rotors, and bolts that hold a jet-turbine together.

Westinghouse Electric Corp., a big

When you put a River to work...
GAS is on the job
to help you

FIRST YOU HAVE A RIVER—but you're going to put it to work. It will be a water highway to carry raw materials and finished products to and from thousands of plants within reach of its port cities. In this vast industrial empire Gas will be applied to an endless number of heat-processing operations. But, Gas will also perform countless other tasks to help you put your river to work because—

YOU NEED TOWBOATS—the work-horses of river transportation. As a production-tool in ship building Gas takes over countless jobs—in casting propellers, annealing miles of wire for electric systems, heating billets for diesel-engine shafts, case-hardening gears of speed-reducers. And Gas has other applications—many of them in barge building because you need—

BARGES TO CARRY YOUR GOODS—the giant cargo bottoms which transport so many millions of tons of raw materials and finished products. Glass liners for liquid carriers are the products of Gas—and Gas ovens relieve the stresses in pressure vessels for other chemicals. Structural shapes and plates are cut by Gas, and fabricated after heating by Gas. This essential fuel is vital, also, to—

YOUR COMMUNICATIONS AND NAVIGATION—because modern river transportation depends on scientific advances in ship-to-shore telephone and radar. In research, in metallurgical processes, for manufacturing operations, Gas is the most efficient and flexible heating medium, applicable as well—

FOR YOUR PRODUCTION-PROCESSING—in any field. The uses of Gas in turning rivers into water highways only emphasize the diversified tasks in which Gas serves industry. There's always a way to do production-line heating with Gas—economy alone is a good reason why you should consult your Gas Company Representative.

AMERICAN GAS ASSOCIATION

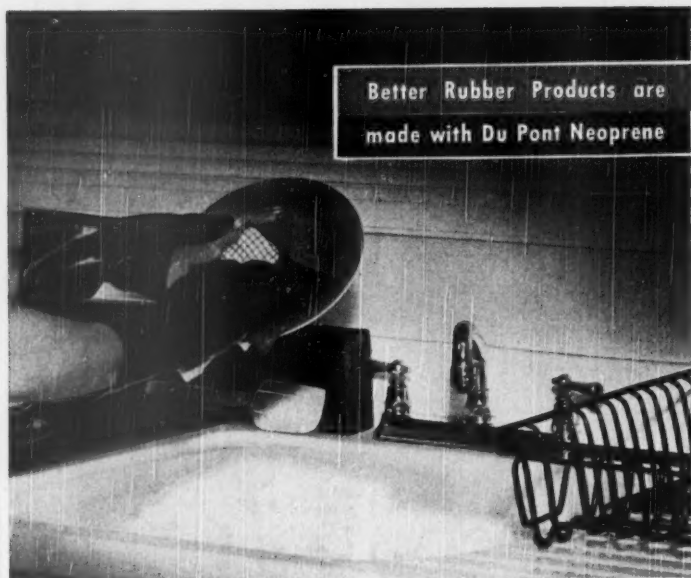
420 LEXINGTON AVENUE, NEW YORK 17, NEW YORK

MORE AND MORE...

THE TREND IS TO **GAS**

FOR ALL
INDUSTRIAL HEATING





EVERYTHING BUT THE KITCHEN SINK!

Long-lasting household gloves and sink accessories are made with tough, resilient neoprene

Every rubber product you see here, is made with a durable elastomer that means long service life in the kitchen—Du Pont neoprene. The household gloves stay supple and elastic; won't become gummy or brittle. This is true, too, of the scraper, soap holder, sponge and dish drainer. For neoprene, unlike ordinary rubber, withstands the deteriorating effect of heat, oils, fats, soaps and cleansers... is little affected by abrasion and aging.

A limited specialty rubber? No. Neoprene adds years to the life of garden hose. It multiplies the service life of conveyor belts, V-belts, air hose, electrical cable and numerous other industrial products. Every year, mil-

lions of pounds of neoprene are used to make a wide variety of products that give you better value—articles that resist oils, grease, and many chemicals; withstand exposure to direct sunlight, and have superior aging and flame-retarding properties.

So when you have a tough job for a resilient product to do—think of neoprene first. Ask your rubber goods manufacturer or tell us about your problem. While we do not make finished products of neoprene, we'll be glad to help you and assist you in finding a source of supply. Just write: Rubber Chemicals Division, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

CONSUMER RUBBER GOODS • WIRE JACKETS • CABLE JACKETS

GARDEN HOSE • AIR HOSE •

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CONVEYOR BELTS • FIELD EQUIPMENT

• COATED FABRICS • GLOVES •

DIAPHRAGMS • SAFETY SOLES

GEARS • WASHERS • RUBBER •

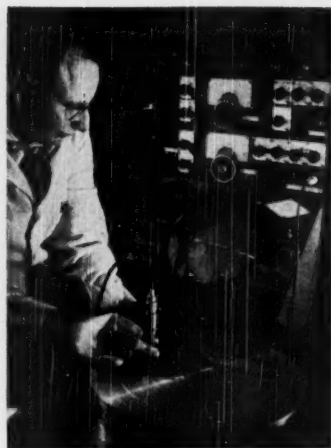
NEOPRENE

The rubber made by du Pont since 1932



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

● Tune in Du Pont "CAVALCADE OF AMERICA"—Tuesday nights—NBC—coast to coast



ULTRASONIC WAVES from transmitter held by engineer bombard the metal, show up flaws on the cathode-ray screen.



FINISHED BLADES must withstand heat of burning gases, centrifugal force of rotor spinning at high speeds.

jet-turbine producer, has developed three heat- and strain-resistant metals in its alloy laboratory that will take this beating. The company calls them Discaloy, Refractaloy, and K42B.

The laboratory produces the metals the same way that a big steel mill would. But its output is a lot smaller, its tolerances and standards a lot higher. Metals such as titanium and molybdenum have to be alloyed in precise quantities.

The three alloys were tailor-made for critical parts of the jet engine. Discaloy was designed for the rotor discs that form the main body of an engine. Refractaloy is used to mold the blades that scoop up the hot gases. And K42B is made into bolts which hold the whole works together.

Glass on Move

In one coat, it generates heat to keep chicks warm. In another, it keeps drivers cool. Bending, tempering stressed.

Cinderella's slipper was a routine sort of product by today's standards. Glass manufacturers are learning to tailor their material to fit special purposes.

Corning Glass Works has a glass that works like a heating element. Corning's E-C glass is Pyrex that has been coated with ultra-thin metallic oxide. When the glass with its transparent skin is hooked up to an electric current, it generates a temperature of 660F.

Company field tests show any number of uses for its idea. E-C glass has already been tried out on poultry breeders to keep baby chicks warm. Sea-going vessels in Arctic service have windshields made of the glass to keep them ice-free. There's even a coffee percolator in the works; it could be electric pot and stove all in one.

• **Bending Glass**—In Detroit this week, technical reports at the Society of Automotive Engineers' regional meeting tell the same story of new uses for glass. Pittsburgh Plate Glass Co. gave a progress report on its own developments in electrically conductive glass, which it calls Nesa. Like Corning's glass, Nesa has a transparent coat, but the coating goes on over conventional glass instead of Pyrex. Pittsburgh Plate can bend the glass into formed shapes.

• **Windshields**—NESA got its start during the war, when icing on plane windshields was a problem.

This ice-melting characteristic makes the idea of NESA glass attractive to automobile men. But NESA has a big drawback from their standpoint: It requires 110 v. across the glass to produce the required current. Cars today have 6-volt systems. Changing that to 110 v. would introduce electrical problems in transformers, heavier generators, etc. Also, the auto men expect there would be legal complications involved. Authorities wouldn't like the idea of a private car carrying 110 v. and heavy amperages across the windshield. Pittsburgh researchers are working on the problem. But radiant windshields are a good way off.

Pittsburgh Plate has been doing some research in properties of conventional curved glass which is showing up in car windshields nowadays. Curved glass has some engineering bugs of its own. When you look through it, bright objects show up double. They sometimes do even in flat laminated glass, because the two sides may not be ex-

The yarn that got hot and bothered

Yarn isn't always as docile as you see it here.

The combination of temperature and humidity in the mill must be right on the button, else yarn gets hot and bothered... picks up static electricity, tangles, catches, snaps and generally raises a costly hob.

When you think of the hundreds of knitting machines in a large mill and the loss in production from frequent breakage, you can see how important humidity control becomes. And why foolproof air conditioning equipment is required.

Designing this vital equipment and installing it exactly to individual mill requirements takes some mighty skillful know-how... the kind that automatically brings the engineered jobs right to York.

York knows air conditioning inside and out. For York has handled installations for every imaginable purpose, from personal comfort air conditioning of individual offices or bedrooms to the critical temperature control required in the manufacture of electronic tubes. More, York is prepared to tackle the challenge of any difficult or complex need that may arise and furnish an answer that works like a charm. And to keep installations perking at peak performance, York offers its unique Certified Maintenance Plan, based on a yearly fee that's determined in advance.



CONCERNED ABOUT climate in your plant? York engineers and equipment make temperamental temperature and humidity behave. Rejects and seconds go 'way down, production goes up! Whatever you make, it's 99 chances out of a hundred that York has already handled a problem as tough as yours.

For Refrigeration and Ice-making, Too

Along with York's reputation on air conditioning is its unquestioned leadership in mechanical refrigeration as well. Since its inception, York has pioneered in the invention and development of methods and equipment to improve business and living conditions, with the

aid of mechanical refrigeration and ice making equipment.

When your business plans call for air conditioning or refrigeration of any type, your local York Representative will help you get full York service right from the start. York Corporation, York, Penna.



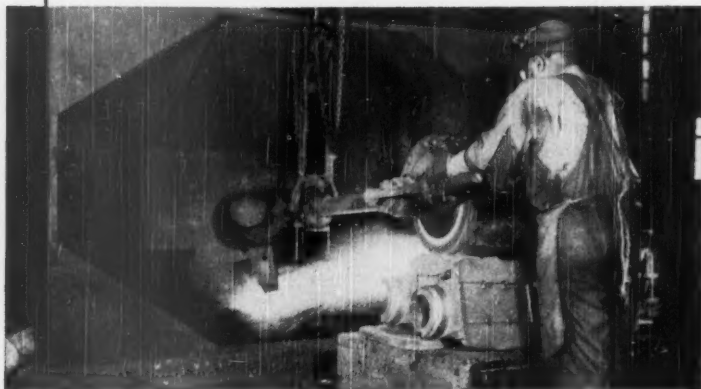
Our business is improving your business

YORK

Refrigeration and Air Conditioning

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1905

Have you visited a foundry recently?



There have been some changes made —for the better—with the aid of ROTO-CLONE DUST CONTROL

DUST, smoke and fumes don't linger in the modern foundry to foul up the atmosphere and obscure worker vision. The solution is simple—quick removal and disposal at the source with Roto-Clone® dust control equipment.

Pictured above is a swing-frame grinder used for finishing heavy castings. Previously, dust, chips and sparks showered the surrounding area. Here they are directed into a hood exhausted by a Roto-Clone which removes the dust and fine chips from the air and stores the collected material for later disposal.

Electric furnaces, shakeouts,

sand conditioning systems, abrasive cleaners—all these foundry dust sources have been given the "Roto-Clone treatment" with equal success. It pays dividends both inside and outside the plant. Inside, because quality of work improves with the working conditions—outside, because of better public relations.

Every plant that creates dust is losing both dollars and good will every day it postpones modern dust control. There's a type and size Roto-Clone for every industrial need. For complete information call your local AAF representative or write . . .

AMERICAN AIR FILTER COMPANY, INC.

387 Central Avenue, Louisville 8, Ky.

In Canada: Darling Bros., Ltd., Montreal, P. Q.

AAF

ROTO-CLONE®
DUST CONTROL EQUIPMENT

*Roto-Clone is the trademark (Reg. U. S. Pat. Off.) of the American Air Filter Company, Inc., for various dust collectors of the dynamic precipitator and hydrostatic precipitator types.

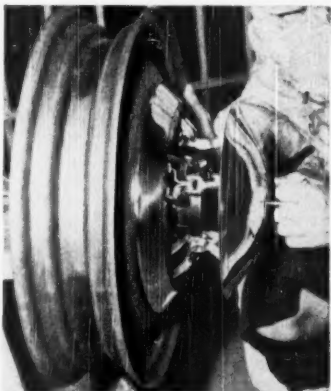
actly parallel. But in curved glass the doubling is much worse.

• **Heat Absorber**—Another Pittsburgh Plate finding: By adding a 4% portion of ferrous oxide to its glass recipe, it can make a windshield that absorbs heat without losing any of the transparency of the glass. That way a driver is less likely to get cooked while driving on a hot summer's day.

• **Tempered Glass**—Tempered glass is getting a lot of attention. When struck, it shatters into almost round particles, doesn't fly in all directions. But it too has a drawback: It is more rigid than conventional auto safety glass, which is bound with a vinyl plastic. If you hit your head against the tempered stuff, you get the full force of the impact—plus a cracked skull. Ordinary safety glass breaks more easily, so it absorbs part of the impact.



AUTO HUB CAP is more than an ornament in a new fastening device developed by Lothar Stanetski, of Bonn, Germany. Brake drum is fitted with prongs. As hub cap is screwed into place . . .



PRONGS are gripped by five tweezer-like levers. Grip tightens as hub cap fastens. This eliminates conventional bolts.

PRODUCTION BRIEFS

Budd Co.'s foundry at Red Lion, Pa., is slated for completion next month. The \$1.4-million plant will turn out gray iron castings for automobile brake drums.

Another new titanium alloy is going into jet engine parts for military planes. This one, a development of P. R. Mallory & Co., is 92% titanium, 5% chromium, and 3% aluminum. It's as strong as steel and only half as heavy.

GE built its own computer, an electronic job called the Omibac. The machine, a digital computer that works arithmetically, is for company use.

Rods and tubes made of du Pont's Teflon plastic are in production at Polymer Corp., Reading, Pa. Application: machined parts for high-frequency electronic equipment.

Rabbit fur is mixed with wool in a fabric developed by Pellissier, Jonas, & Rivet, Inc., Walden, N. Y.

A \$25-million chemical plant, jointly owned by Mathieson Chemical Corp. and Tennessee Gas Transmission Co., will start production near Louisville, Ky., in July, 1951. Products: butanes and antifreeze.

German advancements in improving the wearing qualities of textiles are covered in a Commerce Dept. bulletin (PB-99296). Write: Commerce's Office of Technical Services, Washington 25.

U.S. reserves of crude oil rose 5.8% to 28.4 billion bbl. in 1949, say the American Gas Assn. and the American Petroleum Institute.

Cooper-Bessemer is building one of its gas diesels (BW-Feb.26'50,p46) to power Rural Electrification's new 25,000-kw. generating plant at Poplar Bluffs, Mo.

Fluid transmissions have been adapted to textile machinery by J. Verlyn Booth, Atlanta, Ga. Fluid drives, the inventor claims, eliminate overhead line shafting and spliced belts in textile installations.

A one-year guarantee on TV picture tubes is now standard with Sylvania Electric. Each tube is code dated before it leaves the factory.



Hallmark of a Good Employer !

*None but the finest insurance service—
by Employers Mutuals Specialists—
is "good enough" for him and his people!*

The employer who appoints *Employers Mutuals* to handle his Workmen's Compensation and other business insurance demonstrates the same sound judgment that marks all his other executive decisions.

He knows costs and he knows values—human and otherwise. Thus, he knows he will be actually money ahead by taking full advantage of *Employers Mutuals'* skilled, specialized services . . . accident prevention, industrial nursing and health-hygiene, prompt and fair settlement of all claims. These services are available to every employer-policyholder without a cent of extra cost; in fact, using them often results in lower premium costs. These savings are over

and above regular dividends returned to policyholders!

Employers Mutuals protection throughout an organization is truly the "hallmark of a good employer." Many thousands of future-minded men and women are finding extra job satisfaction from their employment as a direct result of *Employers Mutuals* services in daily operation. Morale is higher, production is better, operation is smoother and safer—everyone benefits!

Employers Mutuals write: *Workmen's Compensation—Public Liability—Automobile—Group Health and Accident—Burglary—Plate Glass—Fidelity Bonds—and other casualty insurance. Fire—Extended Coverage—Inland Marine—and allied lines. All policies are nonassessable.*



EMPLOYERS MUTUALS of WAUSAU

HOME OFFICE
WAUSAU, WISCONSIN

Offices in principal cities • Consult your telephone directory

EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY OF WISCONSIN
EMPLOYERS MUTUAL FIRE INSURANCE COMPANY

PITMAN-MOORE CO. *says:* SYLVANIA TRIPLE-LIFE FLUORESCENT LAMPS

Pitman-Moore Company
DIVISION OF ALLIED LABORATORIES, INC.
Indianapolis 6, Ind.

*... "outlast other lamps which
we have operated
alongside them"*



Pitman-Moore Co. offices in Indianapolis. Their biological laboratories alone consist of more than 20 buildings on an 88-acre tract.

The letter from this outstanding pharmaceutical and biological company represents another of the many indorsements received at Sylvania . . . all confirming our own extensive tests in the field (over 11,000,000 lamps in the last 2½ years) proving that Triple-Life Lamps last 3 times as long as previously rated! (Now rated at 7500 hours; old types were rated at 2500 hours.)

Take the first step toward reducing your lamp costs . . . eliminate the cost of a second and third lamp replacement . . . reduce job breakdown caused by lamp burnouts—just see your Sylvania Distributor or write Sylvania Electric Products Inc., Advertising Dept. L1303B, 500 Fifth Ave., New York 18, N. Y.

SYLVANIA ELECTRIC

FLUORESCENT LAMPS, FIXTURES, WIRING DEVICES; ELECTRIC LIGHT BULBS; PHOTOFLASH BULBS; RADIO TUBES; CATHODE RAY TUBES; ELECTRONIC DEVICES



13½-TONS LOAD rolls over Navy's quick-set road just 24 hours after it was laid.

Sand to Hardtop in Two Hours

Army and Navy are researching quick-acting chemical process for building roads and airfields. Method may be useful for civilians as well as the military if costs are brought down.

Army and Navy researchers are working out a process for making roads in double-time. The military is developing chemicals to mix with sand or soil and harden it into a surface that's tough enough for a jeep to run on—all in two hours.

• **Civilians, Too**—The process has obvious military advantages. Overnight it will make an airstrip out of a soup-mud field, a highway out of a soft-sand beach. But it could be a boon to private industry, too—if the cost is brought down into sight. That's one of the factors that Army and Navy researchers are working on now.

The Navy's Bureau of Yards & Docks, working with Hans F. Winterkorn of Princeton University, is aiming to speed up this process of "soil stabilization," and make it cheap. It is working with chemicals that are readily available, applied by conventional road-making machinery.

• **Navy Way**—In the Navy process, fast-moving construction equipment—a pulverizer and a stabilizer—lays on the chemicals, mixes them into the soil, and smooths out the surface. The chemicals used are furfural resin and aniline; both are in ample supply.

When the furfural and aniline, plus catalysts, are mixed with soil or sand, a chemical reaction starts. The whole mixture hardens up like concrete—but much faster. The speed of hardening is controlled by the catalyst. That's the

trick: to get maximum speed out of commercially available catalysts that will work with standard road-building equipment.

• **Army Way**—Army studies on soil stabilization are being done by the Army Engineer Research & Development Laboratories at Fort Belvoir, Va. The method used here, developed by Prof. John B. Wilbur of the Massachusetts Institute of Technology, produces a pavement with a rubbery consistency that withstands heavy-impact loads.

The Army uses calcium acrylate, treated with sodium thiosulphate and ammonium persulphate mixed on a batch basis. Batches are prepared in steel-drum rotary mixers and then spread on the ground in 2-ft. x 4-ft. patches, 3-in. thick. The mixture stays rubbery for two to five hours as it settles and conforms to the underlying soil.

• **Costs**—Cost estimates are hard to make at the present time. The Navy says its method costs \$2.88 a sq. yd., 6-in. thick, in small quantities; \$1.50 in larger quantities. Fort Belvoir says price estimates now would be meaningless because their chemicals are not yet in quantity production. But some slip-stick work shows the quantities involved: In a 2-ft. x 4-ft. test section, you need 13 lb. of chemicals. That means 16 lb. a sq. yd. or 84 tons for a mile of 18-ft. road, 800 tons for a 6,000-ft. x 150-ft. airstrip.

Sylvania Electric's Flexi-module lighting system

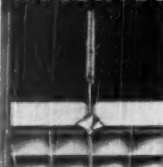
IS

★ MODERN



A new approach to lighting, combining beauty with utility. Store merchandising of the future, here *right now!* Composed of grid louvers as well as opaque, luminous and plastic panels. Clean, inviting appearance further aided by complete concealment of all utilities.

★ FLEXIBLE



Consists of: (1) fixtures, (2) hanger strap and exclusive star suspension (shown), and (3) the louvers. Any fixture may be easily moved, lighted, changed. All leveling of louver ceiling done from below!

★ LOW-COST



Not only is expensive, buried-in-concrete construction avoided, but all services (sprinklers, air-conditioning, etc.) are readily available without chopping. This Sylvania Flexi-Module System compares favorably in cost with plaster ceilings and is lower than other types!

Address below, 500 Fifth Ave., New York 10

SYLVANIA ELECTRIC

FLUORESCENT LAMPS, FIXTURES, WIRING DEVICES;
ELECTRIC LIGHT BULBS; PHOTOFLASH BULBS; RADIO
TUBES; CATHODE RAY TUBES; ELECTRONIC DEVICES

Efficiency goes

UP

Costs come

DOWN

Rotary Oildraulic Elevators
are the most economical type
for 2, 3 or 4 story buildings



Smooth, quiet operation

Smooth starts and stops, accurate floor leveling, and quiet operation are guaranteed by Rotary's precision mechanism.



No costly penthouse

Because it's pushed from below, not pulled from above, an Oildraulic Elevator requires no costly, unsightly penthouse.



Lighter shaftway structure

Rotary's powerful Oildraulic jack supports the car and load—so there's no need for heavy, load-bearing columns and footings.

Over 50,000 Rotary Oildraulics in Use

Rotary, oldest and largest maker of oil-hydraulic elevators and lifts, has served major companies and building owners throughout the nation. Our coast-to-coast organization offers the most complete service in this field. Write for Catalog.

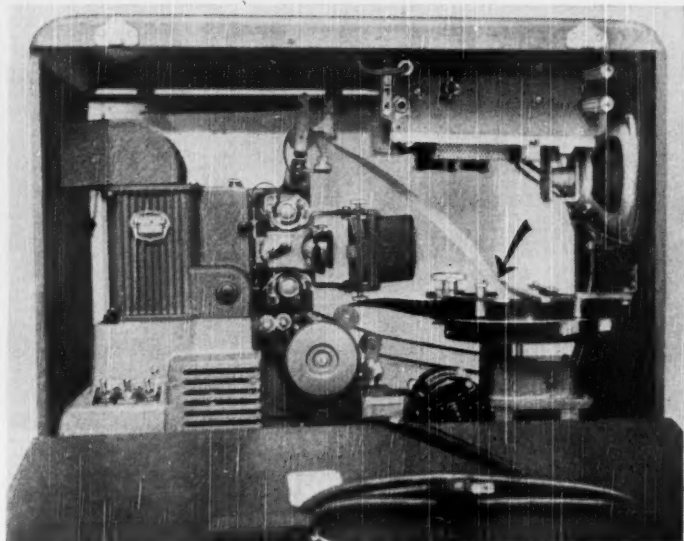


ROTARY LIFT CO.
1125 Kentucky, Memphis, Tenn.

Rotary
Oildraulic
Elevators

PASSENGER AND FREIGHT

NEW PRODUCTS



REWINDER (arrow) feeds Conti-Movie film continuously for 1,500 showings.

Say It With Films—Over and Over

Projector-screen unit makes sales demonstrations on film easier. The gimmick: a winder that doesn't need rewinding.

Motion picture sales demonstrations are effective—but equipment and operation is usually complicated for the operator. So Van Der Schalie Corp., 347 Madison Ave., N. Y., has developed a simplified projector-screen unit. The projector doesn't need to be rewound and rethreaded every time a film is shown. Once the film is in this projector, it will show the same reel over and over without any further adjustments.

• **Operation**—Film is fed through the machine by a motor-driven reel that winds and unwinds the film continuously. The reel feeds the projector with enough slack to prevent stress or tension on the film. The company guarantees a minimum of 1,500 continuous showings of a film without tearing or breakage, if the film is in good condition originally.

Images from the projector are cast on to a rear-projection latex screen. The screen makes an image visible from any position within 180 degrees. When packed up, the whole works—screen and projector—weighs 37 lb.

Conti-Movie is equipped for both sound and silent films. The maker says its picture is clearly visible in daylight, without any changes in ordinary light-

ing, on counters, in store windows, and in rooms seating up to 300 people.

Reels of film for the projector come in lengths of 400 ft., 600 ft., and 1,000 ft.

Lengths of 1,200 ft. and 1,600 ft. are also supplied by the company on special request.

ROYAL IMPROVEMENTS

A simplified electric typewriter has been developed by Royal Typewriter Co., 2 Park Ave., New York 16, N. Y.

A typist can switch from electric to manual operation of the Royal Electric without any complicated or lengthy adjustments. Touch-control sets the machine for the right feel in either manual or electric operation.

The electric model, according to the company, is the first typewriter to have all controls in the same place as on manual machines. The familiar carriage return on manual machines is replaced by an automatic carriage return key on Royal Electric.

Where a number of carbon copies are used, a control regulates the speed of the type bar from light to medium or heavy.

A repeat-underscoring device elim-

*Square D Company
engineered a saving
in printing costs . . .*



by switching to lower-cost, high fidelity
Consolidated ENAMEL PAPERS

• Making hundreds of kinds of switches for almost every electrical need is the Square D Company's everyday business. So ordinarily the mere fact that Square D made *another* switch wouldn't really rate as important headline news.

But Square D's switch to Consolidated Enamels for its equipment catalogs, monthly news bulletins and other important printing is news—and *good news* indeed—to every executive concerned with costs. For it shows how *any* company still using old style, premium-priced enamel printing papers can cut 15 to 25% from net paper costs and, at the same time, maintain highest quality in the printed material itself.

This economy without loss of quality is the

achievement of the revolutionary papermaking process which Consolidated pioneered. It substantially *reduces* manufacturing time, costs and defects by eliminating several expensive operations still required by other papermakers, and produces a paper of the highest quality, simultaneously enameled on both sides in a single high-speed operation.

Perhaps such a process doesn't sound too exciting to anyone unfamiliar with papermaking methods. But it is *solely* responsible for savings of 15 to 25% on the one item that averages one-fifth of the total cost of every printing bill you pay. Certainly, *that's* worth investigating. May we send complete facts and samples without obligation?

© C. W. P. & P. Co.

Consolidated ENAMEL PAPERS

CONSOLIDATED WATER POWER & PAPER COMPANY

Makers of Consoweld—decorative and industrial laminates

• Main Offices: Wisconsin Rapids, Wisconsin

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Operating a major airline like Capital over 5,409 route miles in the industrial heart of the United States, requires aircraft servicing bases of considerable size. One such base in Chicago daily readies planes for passenger, mail and cargo service. Maintenance operations of this type present serious fire hazard problems, for a flash fire in the hangar area could result in building and equipment losses of staggering proportion. That's why Capital Airlines safeguards her capital investment with "Automatic Sprinkler" fire protection.

Scores of sensitive Rate-of-temperature-Rise heat detectors stand ready to discover fire at the first indication of flame. Hundreds of scientifically spaced "Automatic Sprinklers", operating off a battery of Suprotex-Deluge systems, are prepared to shower water throughout the fire area, thereby protecting the building and contents. And most important, the entire operation would be accomplished within seconds from the time the fire originated. Little wonder that Capital looks upon "Automatic Sprinklers" as an important improvement in their unceasing program of positive fire defense.

Whether yours is an airline operation or any other type of commercial, industrial or institutional business, you'll get dependable fire protection with "Automatic Sprinklers". Write or call today for complete information on how you can save lives... save property... and save money with "Automatic Sprinklers".

"AUTOMATIC" SPRINKLER CORPORATION OF AMERICA
YOUNGSTOWN 1, OHIO

"Automatic Sprinkler"
FIRST IN FIRE PROTECTION

DEVELOPMENT . ENGINEERING . MANUFACTURE . INSTALLATION
OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA

inates constant tapping of a key through several words or lines. After the shift lock is touched into place, the typist holds the underscore key for the length of scoring desired.



STACK PAINTERS' SKY SEAT

Smokestack painters and bridge inspectors can now sit down on the job—with a one-man hoist developed by Safway Steel Products, Inc. Safway's bosun's chair hangs safely alongside a wall or stack, gives the operator complete control of lowering and raising the hoist.

The unit is built of rigid tubular steel. Sitting on a bicycle-type seat inside a cage, the worker operates standard bicycle pedals to control his height. Pedals are connected to a winch that reels out suspension cable. The hoist can move up or down at speeds up to 25 ft. per min.

To keep the hoist in an upright position, the cable runs over pulleys at the top and back of the unit. Casters mounted on the front of the cage run against the surface to be worked, ease lowering and raising.

Rated capacity for the hoist is 625 lb. It is furnished with 150 ft. of 4-in. steel wire rope. Cable is easily pulled from its drum for rigging or inspection.

SWIVEL WASHER

A swivel-action washer, called Snap-In, can turn a householder into a part-time plumber.

The button-like device, made by Snap Products Corp., Chicago, Ill., has a spring prong projection that fits into a faucet head. A push of the thumb does the job.

Conventional faucet washers turn under pressure against the face of a faucet base to control the flow of water. The resulting friction against the

washer causes wear and tear. Snap-In, however, swivels during operation of a faucet. The washer itself doesn't turn, so there is little or no wear.

Snap-In is available in sets of four for home repair.

NEW PRODUCTS BRIEFS

Drinking fountain for small children is an added attachment for Westinghouse's line of water coolers. It mounts about half way up the side of a cooler.

Asbestos-glass fabric for curtains and draperies is a product of U.S. Rubber Co. The fireproof fabric can be dyed or printed.

Protective coating for autos and trucks prevents corrosion of underbodies and fenders. It sprays on. Maker: Philip Carey Mfg. Co., Cincinnati 15.

Belt-type fire escape, developed by Morrissey Corp., Box 143, Auburn, N. Y., fastens inside a room, drops down the side of the building. A harness attached to the belt holds you by the shoulders; a brake controls rate of fall.

A half-pint blow torch that doesn't require a hand pump to maintain fuel pressure is made by Turner Brass Works, Sycamore, Ill. A brass wire wick conducts heat from the burner into the tank to build up pressure.

Dry ice slabber cuts bulk ice into shapes 10-in. square and 1-in. thick. Low-voltage heating wires inside the unit do the cutting. The maker: Foster-Built Bunkers, Inc., 757 W. Polk St., Chicago 7.

A label holder, Roll-a-Matic, attaches to the carriage of a typewriter, automatically feeds in labels for typing. It's a product of McCullough Label Co., Macon, Ga.

Spiral-shaped clothespins are made from red Celanese plastics by Daidem, Inc., Leominster, Mass. Pressure on the inside of the spiral opens the pin.

Multipurpose grease, called Litholine, will be marketed by Sinclair Refining next month.

Protective inner sole slips into shoes, acts as a shield against nails, glass, and rocks. It's made of leather, spring steel, and cotton duck. Rubberhite Co., Inc., 115 Whitehead Rd., Trenton 4, N. J., is the manufacturer.



How to make a *HIT* out of a *MISS*

The most beautiful Miss in the world is only "box office" to Hollywood, where batteries of klieg lights glamorize beauties to make them pay off at the ticket window. These klieg lenses made by McKee help light the stars.

Star performers throughout industry depend on McKee Glass. Manufacturers glamorize products with McKee-made window panels, television mirror blanks, utensil covers, trays, bowls, urn liners, dial glasses—to name only a few items. McKee mass-produces custom-tailored glass for outstanding volume—and quality—names in America. So, if you've been missing out on profits that should be coming your way, write to McKee and let us help you.

Even in industrial processes, you can often cut costs or turn out better work with machine parts of McKee glass.

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McKee klieg lenses are made of McKee borosilicate heat-resisting glass. Furnished according to specifications in diameters from 2" to 20".

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Forming,
Eh?



Right you are! Get used to a product, and you keep on buying it. Especially if it's top-flight. Like Rapistan® casters.

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Rapistan Steel-Forged casters are Flame-Hardened, by an exclusive process, for unsurpassed strength and long life.

And Rapistan's new, exclusive Cold-Forged casters are a minor miracle! They'll outwear any ordinary quality caster—and they cost much less.

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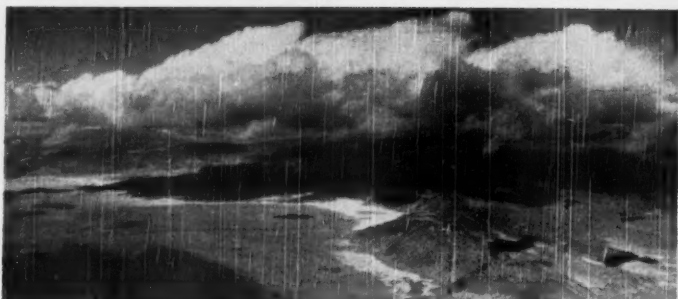


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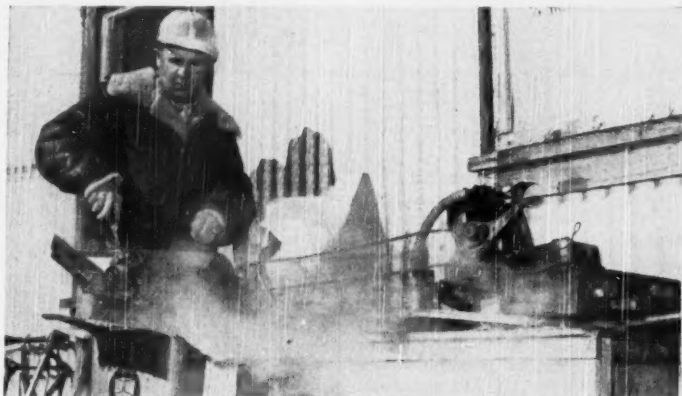


HAND TRUCKS • FLOOR TRUCKS • CASTERS

WEATHER



A CLOUD ROLLS IN over the Sierras. But it would probably just sail past unless . . .



PILOT SYMONS comes to rescue. He's chopping up dry ice to drop from plane.

How To Grow a Snowstorm

STORY ON PAGE 91



THAT SHE BLOWS! Chilled by pellets, the cloud explodes into a snow flurry.
(TURN TO PAGE 91)

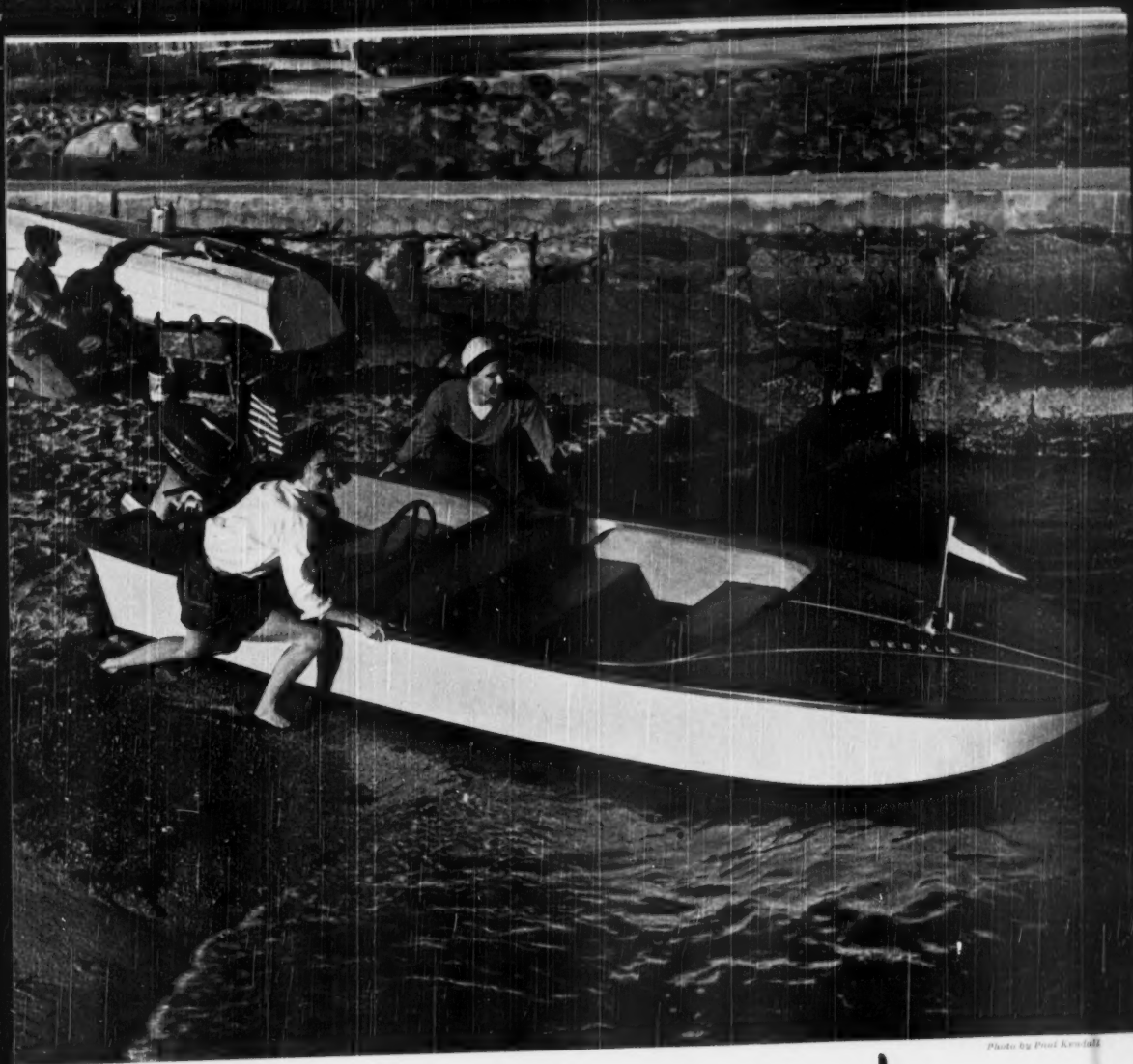


Photo by Fred Kewell

First in the water!

SPRING'S HERE—and it's down to the sea in boats for thousands of sailors. But first in the water—and last out for repairs—are the new LAMINAC® Resin (Fiberglass mat reinforced) motor and sail boats.

These sturdy craft need no conditioning—no caulking or painting—even after a winter in the open. They will not crack, warp, rot or corrode and are highly resistant to salt water and marine worms. Light in weight, easy to launch and handle, they are always seaworthy.

LAMINAC Resin, from which these boats are made, is an interesting new plastic material developed by American Cyanamid Company. Impregnated in sheets of fabric, paper or glass fiber, LAMINAC also makes possible the production of almost indestructible articles such as housings, trays, tabletops, tote boxes, lampshades, toys, electrical parts, decorative wall panels and other large parts. It is another development in Cyanamid's line of plastics that adds value to the things you buy.

*Reg. U. S. Pat. Off.



AMERICAN Cyanamid COMPANY

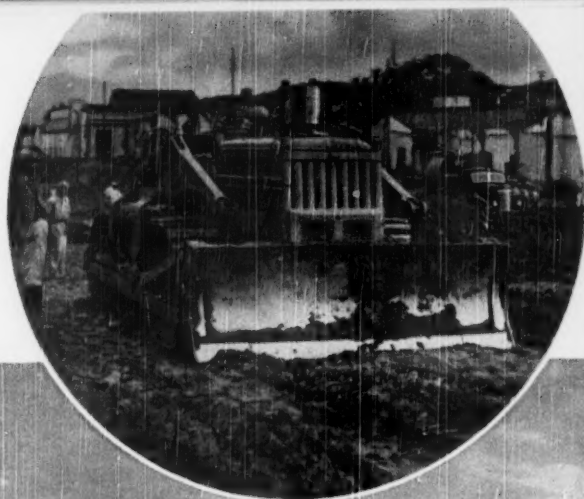
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Materials for the Plastics Industry—one of the many industries served by Cyanamid

AMERICA BUYS — TO SELL

Venezuela's oil pays for U.S. machinery to develop resources

Right, an American bulldozer widens a street in Caracas, Venezuela's capital.
Below, a tanker is docking at Lake Maracaibo, chief source of Venezuela's oil.



Chester T. Swinerton, manager of our Caracas branch, has had 34 years' experience with National City Bank, 29 in Latin America.

BLESSED by nature with vast resources of petroleum, Venezuela wisely trades the dollars they bring in for equipment to develop her communications and other resources. This year, shipment of another Venezuelan resource—iron ore—begins.

The oil industry, developed mostly by American capital, brought to Venezuela in 1949 more than 600 million dollars. In turn, Venezuela's purchases here exceeded 500 million dollars, making her our best Latin American customer. About one half of these expenditures were for machinery, motor vehicles, and steel mill products; the remainder chiefly for textiles, dairy products, grains, drugs and chemicals.

To those trading with Venezuela, National City's branch in Caracas, with its correspondents in other cities, offers speedy, convenient, experienced service. Ask officers of our Overseas Division at Head Office for information.

NCB Travelers Checks protect travel funds. Buy them at your bank.

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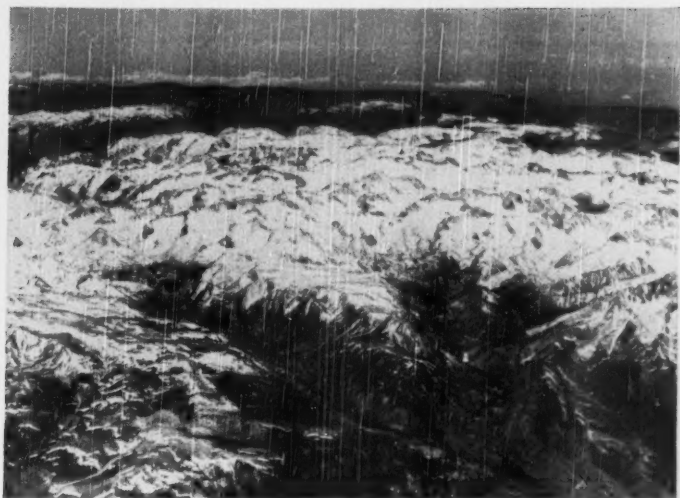


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Write for color-illustrated booklet describing "Overseas Banking Service"



BLANKET OF WHITE on California's rugged peaks means man-made power for generating plant of California Electric Power Co.

Snow Bonus for Power Firm

California Electric has made snowfalls for two years to fill its dwindling reservoirs. Score for 1948-1949 winter: 2.2-billion gal. New York City gives rain-making program green light.

When snow falls over a particular spot in California's Sierras, California Electric Power Co. feels pretty smug. For the chances are that the company's own weather makers made it. For two years they have been enticing "bonus" snow from reluctant clouds to fill the reservoirs that run CEP's generators.

• **New York Acts**—CEP is one of the first to apply weather control commercially. But in New York City, another big rain-making project moved ahead this week. The city voted \$50,000 for a six months' test aimed at filling its badly depleted water-supply reservoirs. It put Dr. Wallace Howell, director of Mt. Washington Observatory, New Hampshire, on the job. He'll head up a program to pull rain out of clouds with both dry ice and silver iodide (BW—Feb. 18 '50, p. 25).

No sooner had the city acted than the state moved, too. Bills covering the legal aspects of weather making were pushed in the legislature. One bill would take things out of the city's hands, give them to the State Water Power & Control Commission.

• **More Power to CEP**—However New York's program works out, California Electric Power is snow happy. In the 1948-1949 winter season, its bonus snow added an extra runoff of 6,500

acre-feet (some 2.2-billion gal.). This netted the Riverside (Calif.) company an additional 14.3-million kwh.

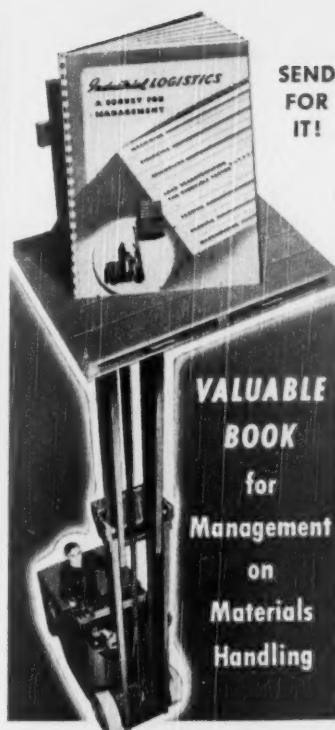
It was in 1947 that CEP went into the snow business in earnest. The company needed water. Two years of drought had left its five powerhouses operating at only 65% of capacity.


Engineer Stuart Cundiff noticed that some potentially good rain clouds regularly rolled eastward over his company's reservoirs without raining or snowing a drop—there or anywhere else. He went after those clouds.

First he tried seeding them with silver iodide. Particles of this chemical act as nucleuses around which cold droplets in the clouds freeze, to get a snowflake started. But silver iodide works best when released from below the clouds. Since the rugged peaks were in the way, CEP shifted to dry ice.

• **Pinpoint Operation**—Now, operating from a converted P-38, Pilot Robert Symons has made a fine art of seeding a small area. CEP can pinpoint its man-made snowfalls to cover just the spots where they do the most good—above its reservoirs and watershed.

The operation suits nearby—and thirty—Los Angeles fine. The city gets the water after it passes through CEP's powerhouses.



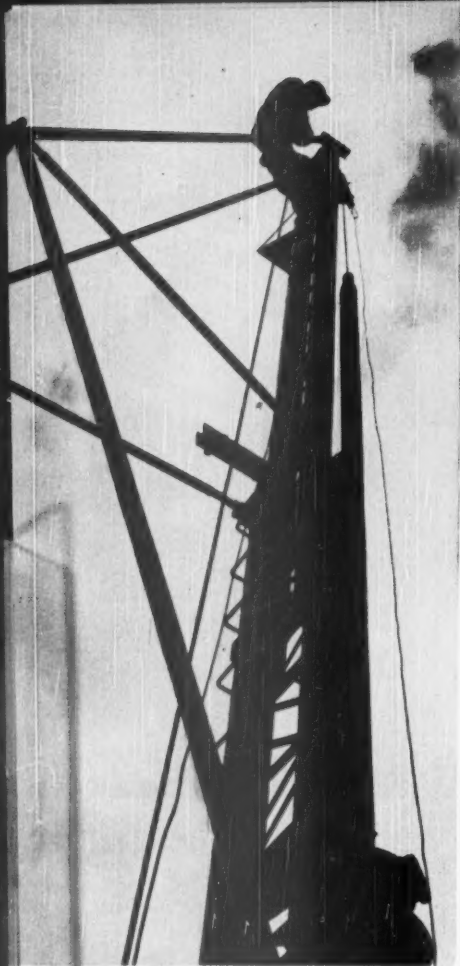
BASED ON ELWELL-PARKER'S 44 YEARS' EXPERIENCE, this pictorial study is entitled "Industrial Logistics". It shows how you can save time, increase safety, and make NEW profits in Procurement, Production and Distribution. The illustrations present a preview of the materials handling pattern that the  man can establish for you.

Learn about the savings being made by over 50 types of Elwell-Parkers (both gas and electric powered) in 300 branches of industry. For your copy of "Industrial Logistics", write The Elwell-Parker Electric Co., 4003 St. Clair Avenue, Cleveland 3, Ohio.

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DRILLS like this probe rocky Labrador soil for ore deposits. Man at top is greasing drill.



CREW starts drill bailer down to get samples of subsurface iron ore. Drill site is at Hollinger-Hanna's deposit in northern Quebec and Labrador.

Prospecting: 1950 Style

About \$7-million has already been sunk into exploration and surveying of Hollinger-Hanna's giant ore deposits in northern Quebec and Labrador (BW—Feb. 11 '50, p19). Surveyors have set up shop and are now engaged in full-scale aerial and ground exploration and mapping.

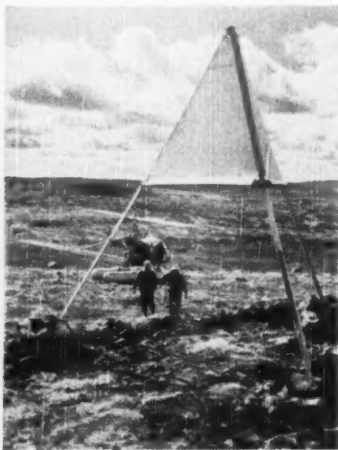
Big churn drills are already taking test cores from the ore deposits. Cores get initial test at the lab set up at the deposit site, and then they go to M. A. Hanna's main testing lab at Iron River,

Mich., for a final check. Some ore in these deposits has assayed at as high as 69% natural iron. The average runs around 58% against about 51% for Mesabi ore.

Next step is completion of a railroad from the deposits to the St. Lawrence River. Then supplies and equipment for full-scale mining operations can be moved in. Transportation is one of the biggest problems of the development. Some spots in the area are inaccessible except by helicopter.



SURVEYOR checks section of mosaic made up of aerial photographs of the terrain.



HELICOPTER, only way to reach some spots, picks up surveyors after day's work.



AERIAL PHOTOGRAPHS of the region are pieced together to form mosaic working maps.



CHEMIST analyzes ore samples in assay laboratory at the deposit site. Then they are shipped to M. A. Hanna Co.'s main lab at Iron River, Mich., for more tests.

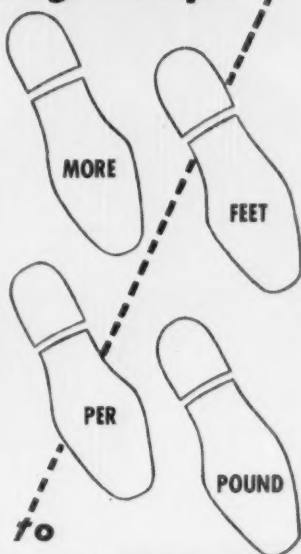


MACHINE SHOP keeps equipment in shape. Power shovels, bulldozer blades, and trucks, knocked down for shipment, are reassembled here.



CHIEF SURVEYOR Howard N. Spence goes over mosaics, plots next day's surveying. Once preliminary exploration and surveying are completed, ore mining will begin.

Big Steps



Cold Rolled Strip Steel Savings

More finished parts per ton will step you ahead when you figure costs. And that's just what CMP Thinsteel can do on many fabricating jobs where cold-rolled strip is required. CMP precision rolling assures the close tolerance needed for maximum yield. More savings accrue, too, with uniformity of all physicals that reduce shut downs and increase die life. So your investigation now of CMP Thinsteel is a step in the right direction—if you're interested in product improvement and better profits.

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Two quarter-century concrete streets.
Upper photo: Sixth Street, Sheboygan.
Lower Photo: Milton Avenue, Janesville.

A tale of two cities... how **CONCRETE** saves taxpayers money

THERE'S A NEW "tale of two cities" in Wisconsin that's of real interest to motorists and taxpayers. These two cities, Sheboygan and Janesville, have kept accurate records on street maintenance costs for many years. Their records show that it costs only 12% to 30% as much per mile per year to maintain concrete streets as it does to maintain the other types of pavements in the two cities.

Hundreds of other cities have found that concrete streets render low-maintenance-cost service. Low upkeep cost also is an important feature of concrete houses, churches, schools, factories, hospitals, public buildings and farm improvements. Concrete's low maintenance cost, longer life and moderate first cost result in **low annual cost**.

So, no matter what you may plan to build, choose durable, fire-safe concrete construction if you want to get **low-annual-cost** service.



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A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work

TAXES

Sweet Pill

Tax bill, as it shapes up in House, won't be hard for business to swallow. Cuts are big, hikes relatively small.

The House Ways & Means Committee has decided what it is going to put in—and leave out—of the 1950 tax bill. On tax cuts, the representatives will go further than Truman wanted. On hikes in other taxes to make up lost revenue, they'll stop short of what Truman asked for.

The measure won't reach the floor for at least three weeks. But members have their minds made up now on major points.

• **\$1.1-Billion Cut**—It is now certain that taxes will be cut \$1.1-billion—the bulk of the money to come out of excise receipts. New taxes to be imposed will bring in no more than \$250-million.

Here's what the committee is going to put in:

Excise cuts. Current rates will be cut in half on retailers' taxes, levies on freight and passenger traffic, and a lot of manufacturers' taxes. Even the amusement tax will be cut—though the committee hasn't decided just how; outright exemption for tickets costing less than 40¢, 50¢, or 75¢ is being considered.

Tighter gift and estate taxes will be written in. The committee counts on them for most of the new money raised by the bill.

Elimination of the notch will do away with the 53% rate on corporate income between \$25,000 and \$50,000.

Plugged loopholes on other taxes may add, at most, \$100-million a year. But the committee will have trouble here. It has already decided to pass over most of the loophole recommendations Truman made.

The committee intends to forget about:

- Raising the 38% ceiling on the corporation tax.
- Cutting depletion allowances.
- Taxing the business profits of charitable or educational foundations. A majority of the committee would like to apply tax clamps here, but it wants to put the squeeze on co-op profits at the same time. And the committee doesn't want to touch the politically powerful co-ops without first laying the groundwork with a formal study.
- Schemes to make corporations withhold some taxes stockholders have to

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And scores of new projects are on the way—including an automotive plant 1,700,000 square feet in area!

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David A. Aitken, Manager

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Only the Cleveland-Northeast Ohio area, *the best location in the nation*, affords business and industry this unique combination of superior advantages:

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- Many producers of parts, materials and supplies.
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- Ample financial services.
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- Favorable tax structure (no state income tax).
- Diversified industries to supply and be supplied.
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- Excellent living and cultural environment.

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In Chicago, as in other cities, American Blower Air Handling Products serve commerce, industry and public utilities. For air handling data in the Chicago area, call American Blower—Financial 6-2531. In other areas, consult your phone book.

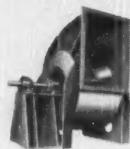
Look before you buy. Comparison tests prove the superiority of American Blower Products. There's a big difference in quality, design, quietness, operating costs and efficiency between American Blower and other air handling equipment.



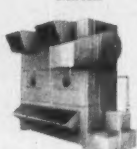
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In addition, they know that, whether the product costs \$43.75 (price of a small ventilating fan) or runs into thousands (power plant equipment), they get the

benefits of American Blower's broad scale engineering and research experience.

If you would like to know how you can profitably apply American Blower Products to your business, ask your Heating, Ventilating and Air Conditioning Contractor or consult the nearest American Blower Branch Office.

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pay on dividends will go by the board.
• **Mills Bill**—The only major point still up in the air is the Mills bill—the plan to speed up collection of corporation taxes by requiring payment in two quarters, rather than in four (page 140). The plan's appeal rests on the fact that it would swell fiscal 1951 receipts with cash that normally isn't due until fiscal 1952.

No one is downright enthusiastic about the scheme, yet no one wants to drop it. Desire to keep the budget from getting much further out of balance may yet put it over.

Ways & Means members don't think that President Truman will like their bill. But they believe that Congress is in a mood to override a veto.

Bureau Law

BIR keeps making tax law whether Congress does or not. Samples: group insurance, pay for keep, strip mining.

Congress has produced no major tax law so far this year—yet the U.S. Revenue Code today is fatter than it was on Jan. 1.

Reason: a steady stream of rulings that issue daily from the Bureau of Internal Revenue. The courts, of course, modify the code, too, but not on the same scale.

• **Discretion**—BIR gets its authority to make rules from tax legislation previously passed by Congress; most bills carry phrases like "in such manner as BIR may prescribe" or "with the consent and approval of the commissioner."

Some BIR rulings are so trivial they hardly affect taxpayers at all. Instructions to local revenue agents on how to index returns, for instance.

But other bureau edicts can mean more—or less—time, trouble and money for businessmen.

Here are some of the rulings that have come out of BIR recently:

• **Group Insurance**—For many years, the group insurance that businessmen bought for their employees was straight term—that is, it provided only protection; no cash value accumulated for the employee's benefit. Accordingly, BIR did not regard the premiums paid as taxable worker income.

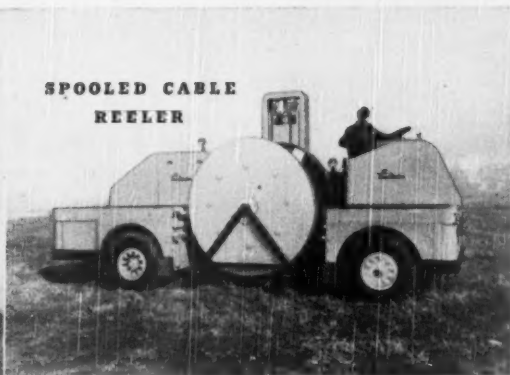
Recently, there has been a switch to the type of policy that accumulates substantial money value—surrender values and paid-up coverage—in addition to protection. So a question arose in many employers' minds: Do premiums on these so-called "group permanent" policies count as income to the workers or not?

A few businessmen decided to ask

Four machines in one!



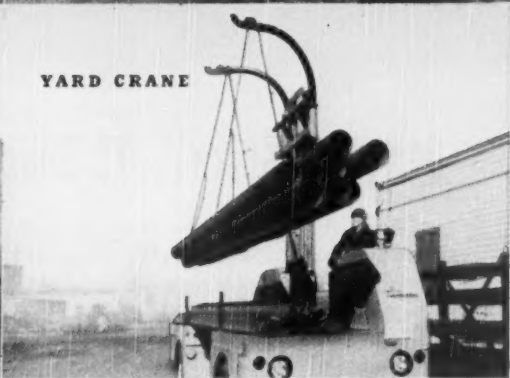
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YARD CRANE

Before you buy any "single-purpose" machine—for lifting, loading, stacking, or transporting materials—it will pay you to take a look at the Traveloader. For this remarkable new machine does **many** jobs . . . with one investment, and one operator.

As a side-loader, the Traveloader can reach out and pick up a 10,000 lb. load—material of any length from 6 to 66 feet—deliver to destination . . . and stack in storage up to a deck height of 12 feet.

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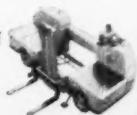
lifting and carrying. It can reach down into gondola cars for loading or unloading.

As a spooled cable reeler, it has another attachment for loading, transporting and the reeling or braking of spooled cable.

As a strip-steel carrier, it uses a quickly-attached ram arm to pick up and transport large strip steel coils, or other heavy coiled materials.

The whole story of this new, ingenious, multi-use machine is told in a booklet now ready. Mail the coupon below, and we'll send you a copy at once.

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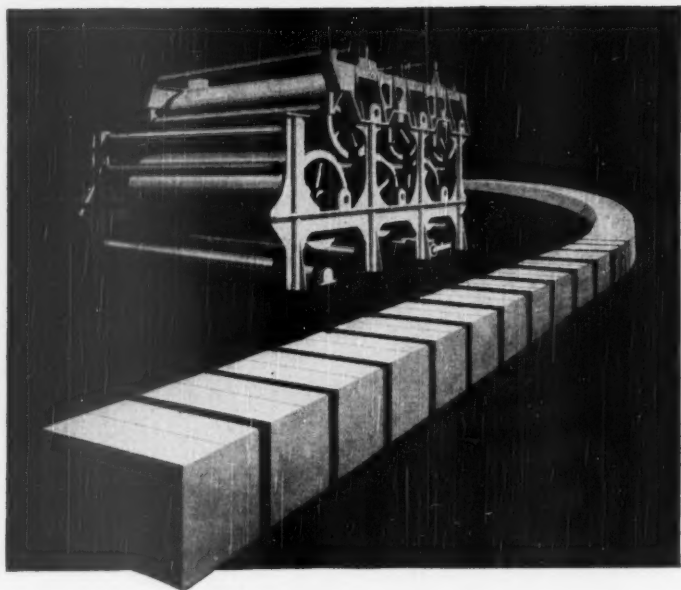
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Maximum product dependability with minimum cost are the result of years of experience of Lukenweld engineers working with steel plate. Higher predictability, improved appearance, resistance to shock, reduced weight, increased strength and rigidity, more flexibility of machine design, reduced production costs and elimination of patterns usually result from the use of Lukenweld construction. Here at your disposal are Lukenweld's knowledge of machine design, construction and installation... plus Lukens 140 years of experience in developing and producing specialty steels.

If you are considering new cylinder drying machinery, processing machines or other finished units, write Lukenweld, Division of Lukens Steel Company, 483 Lukens Building, Coatesville, Pennsylvania.

Improved machinery for improved processes through engineering

LUKENWELD
A DIVISION OF LUKENS STEEL COMPANY



BIR. Late last month, the bureau replied: Yes, they do.

So, after July 1, if the policy you pay for gives your employees more than just protection, you have to treat the premiums paid for extras as worker income—and deduct the proper withholding taxes from paychecks.

BIR, however, does not consider premiums as income if the policy makes an employee forfeit the extra benefits on quitting his job (IT:EIM; Mimeograph No. 6477).

• **Room and Board**—There's a provision in the revenue code that reads: "If living quarters or meals are furnished to employees for the convenience of the employer, the value thereof need not be added to compensation."

BIR thinks a lot of taxpayers have used this language to reap unwarranted windfalls; it seems that practically every worker whose job normally provides living quarters or meals fails to mention this as compensation when he figures his tax.

The bureau, however, has always felt that the section applied only to rare cases—when, for example, a sudden snarl keeps men on the job long after their quitting time.

So BIR has issued a ruling designed to put a stop to these losses. Hereafter, where living quarters and meals are regularly supplied to an employee by agreement, they must be considered compensation for services rendered.

The equivalent in value must be included in the employee's return; the employer must withhold taxes (IT:EIM; Mimeograph No. 6472).

• **Depletion for Strippers**—Where coal beds lie near the surface in hilly areas, the most economical recovery is obtained by employing strip-mining contractors who move their equipment from one man's plot to another's.

The contractors don't own the lands they work, yet they claim depletion allowances. And, early this month, BIR agreed they were entitled to such relief—in most cases. By implication, the ruling applies to contractors who work other kinds of mineral deposits.

The bureau decided that ownership of a "capital interest" in a mine was a good standard to go by. It ruled that a business can, by contract, acquire a depletable capital interest in a mineral deposit. The contractor makes an investment and at some point becomes owner of the mineral. And he suffers when a strip gives out.

The bureau, however, won't O.K. all deductions for depletion. If the contractor receives no binding right to extract the mineral—i.e., if his contract can be canceled at the whim of the owner of the mine—he is not considered to have a capital interest. Lacking such an interest, he can't deduct depletion (G.C.M. 26290).

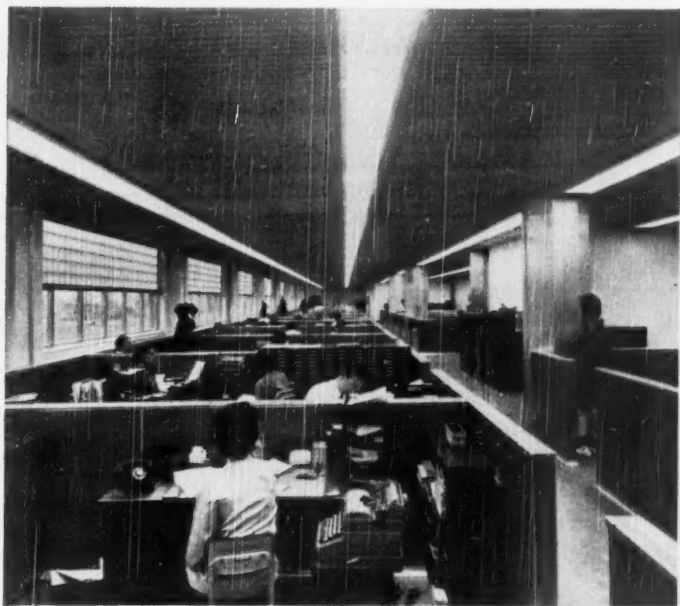
PICTURE REPORT



OLD The Ford plant at Louisville was a handy site for Reynolds Metals' sales office. But before Reynolds began a \$500,000 remodeling job, it wasn't very beautiful.

Reynolds Chooses Aluminum

To remodel a Louisville assembly plant into an office building, Reynolds Metals falls back on its own stock in trade.



NEW All dressed up, the office gleams with one of Reynolds' favorite materials. Ceilings and partitions are of corrugated aluminum sheeting. (TURN TO PAGE 100)



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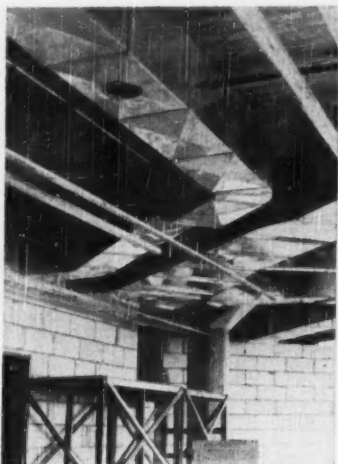
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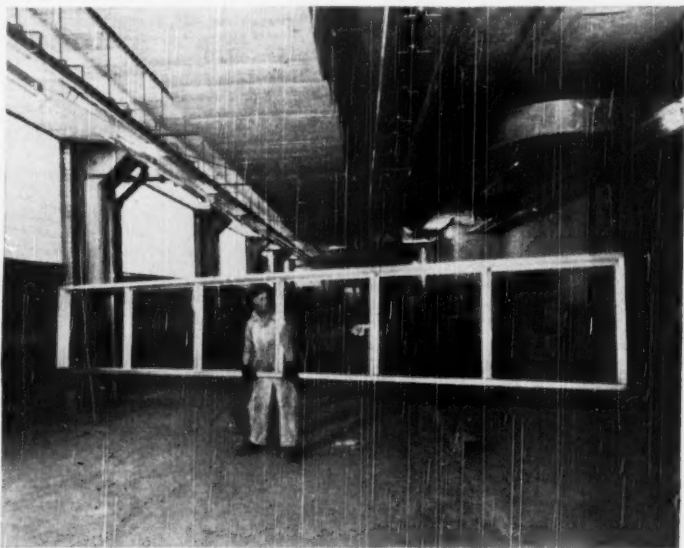
ALUMINUM (Continued from page 99)



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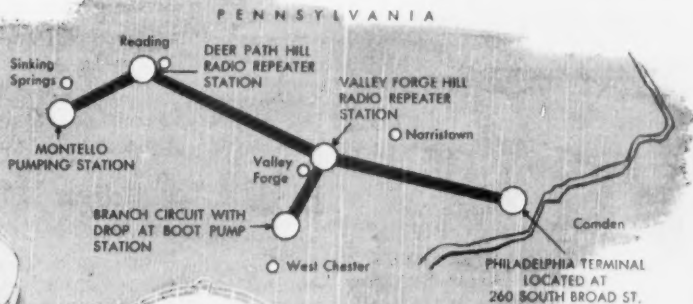


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DEFENSE



DEFENSE CONSULTANT Eric Biddle (left), of National Security Resources Board, and Senator Brien McMahon, chairman of Senate Atomic Energy Committee, making . . .

Defense Plans Take Shape

First results in government program for industrial mobilization and civilian defense are beginning to show up. "Phantom" contracts are going out to industry. Air-search net spreads.

The first hazy outlines of a government program for civilian defense and industrial mobilization in case of attack are beginning to show up. The National Security Resources Board's tentative plans for industrial mobilization, standby legislation, and civilian defense are scheduled to go to Congress on Apr. 1.

Though defense plans so far seem scattered and uncoordinated, they do mark progress. Government agencies have been pegging at these problems since the end of the war. They haven't made much headway—largely because all the public excitement has died down in the past three years.

• **Public Pressure**—When the war ended, plans for industrial mobilization and civilian preparedness got top priority in Washington. Wartime controls over production, prices, and civilian defense were still fresh in everyone's memory. And the country, remembering all the false starts in organizing for World War II, put pressure on officials to set up plans to shift the U.S. into war gear on a day's notice.

But the interest in mobilization planning evaporated fast. The newly formed National Security Resources Board never

even got a permanent chairman. And it seemed that the long-talked-of standby legislation would never get to Congress for debate.

• **Phantom Orders**—But plans for industrial mobilization and civilian protection have been moving along bit by bit.

Phantom orders are now starting to go out to industry. Phantom orders are standby contracts issued by the government to let industry know what and how much it should produce in case of war. Once the phantom orders are placed it takes only a quick go-ahead to start contractors going on war work.

Phantom orders are based on exhaustive studies of potential industrial capacity—which types of tools and weapons will be needed and how many, which equipment should get top priority. The orders are subject to continual review and updating.

Right now the National Security Resources Board is getting ready to issue phantom orders for mechanical and hydraulic presses. At the same time it is updating orders for machine tools and gages that already are out.

The Military is mobilizing industrial facilities for applied research, too. One good example is its interest in the cold

extrusion of steel into shells, rocket motors, and similar military equipment (BW—Aug. 9 '47, p. 21).

Last week, Col. Merle H. Davis, chief of the Industrial Division of Army Ordnance Dept., disclosed that contracts have been placed with a number of companies to manufacture pilot lots of extruded ordnance equipment. Some pilot lots have already passed ballistic and metallurgical tests. (The extrusion process is not yet in the commercial stage.)

Mullins Mfg. Corp., Salem, Ohio, is making 105-mm. shells. The contract calls for 1,000 of them. A special press, with variable stroke and pressure is being installed for the work. Mullins is also working on a 4.5-in. rocket motor and head.

Heintz Mfg. Co., Philadelphia, is making the 105-mm. cartridge case. Heintz is trying to make the large case directly from bar stock.

Stoner Mfg. Corp., Aurora, Ill., is producing 20-mm. cartridge cases experimentally. The Metroloy Co., Newark, N. J., is in process of making an experimental 60-mm. mortar shell by extrusion. Another contractor, Norris Stamping & Mfg. Co., Los Angeles (which did considerable development work on steel shells during the last war), is making the cup of the Navy's 3"/50 cartridge case.

• **Plant Dispersal**—The military has finally decided on what it wants in plant dispersal. It's not advocating that industry pack up and evacuate whole sections of the country to move inland from the coasts. Political reasons alone would rule that out. But when new plants are built, the military wants them to disperse within an area, preferably with protecting hills between them. The question of digging certain essential industries underground is still being debated.

• **Air Defense**—Civil Aeronautics Administration has reinstituted the vital defense area from Norfolk, Va., to Limestone, Me. This means that all planes entering the area from the sea have to file flight plans in advance or risk having fighter aircraft (carrying real bullets) come up to see who they are. For the present, these requirements are more experimental than strategic. However, they are a first step toward setting up similar protection along all U.S. coastlines.

But flight limitations around Los Alamos, N. M., are in no way experimental; they mean business. Anti-aircraft and fighter plane protection is being supplied to all atomic energy plants. At the outbreak of any war these plants would be prime targets.

The Air Force is going ahead on its project for a radar-warning network belting the North American continent. When enabling legislation for the proj-

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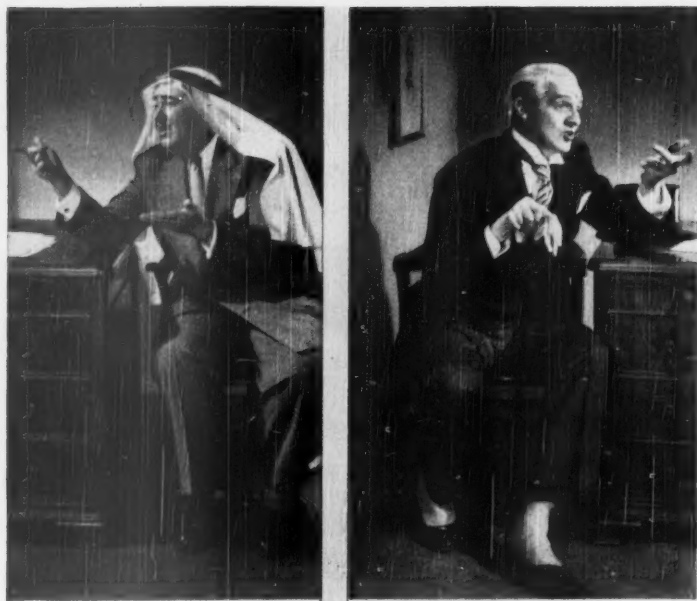
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IOWA DEVELOPMENT COMMISSION



THE WALLS THAT HAVE NO EARS

Builders of Washington's new Maiatico Building,* occupied almost entirely by the Marshall Plan's ECA headquarters, found it important to install a no-duct air conditioning system.

Reasons? Complete privacy is essential in these government offices and sound *will* carry through ordinary ductwork. Additionally, the architect was concerned with cost, ease of installation, flexibility and operating economy. So he brought Trane equipment into the picture.

Some 500 UniTrane under-window air conditioners were installed throughout the building. Occupying little more space than an old-fashioned radiator, these new units heat, cool, remove excess moisture and circulate the 100% filtered air. They provide individual room control. All without ducts.

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ect went through last year, no new funds were appropriated. However, Congress has authorized the Air Force to spend \$50-million of its funds on the radar network if it takes that sum out of its other appropriations. The Air Force is now buying up land, building fighter-director radar stations. Canada is cooperating to fill in the northern gap.

The old wartime civil air warning system has been set up again. Civilian aircraft spotters are being recruited and organized. They'll have more to do than they did in the last war.

• **Draft**—A new selective-service act will continue the standby draft until at least 1952. No men will be drafted under the new act, but 19-year-olds will be required to register, records will be kept up to date, and the drafting machinery will be kept active.

• **Second Capital?**—Bills introduced on Capitol Hill to cope with the possible destruction of Washington, D. C., now number close to 40. They cover everything from two duplicate capitals (one possibly underground) to setting up military control and detailing lines of succession. One bill would completely disperse the government (the federal triangle of government buildings is very vulnerable).

It's hard to say which, if any, of all these bills Congress will adopt. If things get hotter, it will be willing to spend more money. In any case, Congress will specify a line of succession or some way of quickly reestablishing federal control in case official Washington is wiped out. That won't cost much. Some provision for setting up duplicates of essential records looks like a good bet, too.

• **"Live" Blood**—Enough blood to cut casualties from an atomic disaster is the object of the Red Cross' current drive to set up blood donor stations all around the country. Last year 30 new ones were established. Another 10 will be added this year. The big trouble with radiation sickness is that plasma is useless. It takes whole blood, which can only be safely stored for 21 days. The goal of Red Cross blood research is to find a way to keep red corpuscles alive as long as they would ordinarily live in the body—100 days. In an atomic attack the demand for "live" donors would be unprecedented.

The Atomic Energy Commission is preparing instruction programs to tell civilians what to do after an atomic attack. The job now is to teach instructors. To do this the AEC is organizing three five-week radiological monitoring courses on how to determine the amount of activity in a "hot" area, what is safe and for how long an exposure. Also, there will be a series of one-week training courses for instructor-doctors on the treatment of radiation injuries.

PUBLIC WORKS

Heavy Slate

Some \$26-billion worth of projects have been authorized by Congress. Backlog would be handy if depression loomed.

Uncle Sam's shelf of public works projects—always a good standby prop if a depression blew up suddenly—is creaking like a festive board. As of this week Congress has authorized some \$25-billion worth of projects to be built whenever money is made available. And this figure does not include military works.

• **Figure Asked**—In his January budget message, President Truman asked Congress for a \$3-billion public works spending program for fiscal 1951. If Congress comes through, \$25-billion of authorized future works will still be in the backlog at the end of fiscal 1951.

Public works projects get on the authorized list in two steps: (1) A federal agency asks Congress for money to make a survey for a particular item. (2) If Congress approves, the project's estimated cost is added to the list. Authorization does not guarantee that the project will become a reality. Congress must still appropriate money for the specific job.

• **On the List**—Of the \$23-billion worth of projects now on the future list, more than half is allocated to programs of the Army Engineers and the Bureau of Reclamation. The engineers themselves can account for \$9-billion, much of which would go for flood control. One of the biggest single amounts (\$573-million) is earmarked for the perennial St. Lawrence seaway. The Bureau of Reclamation has about \$5.5-billion of authorized future public works.

Other agencies who figure largely are: Dept. of Agriculture (\$1.5-billion), VA hospitals (\$500-million), Atomic Energy Commission (\$200-million), etc.

• **More May Come**—Altogether, authorized future civil public works expenditures come to nearly \$26-billion. But even this is not all-inclusive. If Congress makes further authorizations for fiscal 1952 and beyond, the figure will climb. On Congress' agenda are: a new federal-aid highway program to replace the present one that expires in fiscal 1951; an omnibus bill for flood control, rivers, and harbors to replace the one that got snarled up in the Senate last session.

At a minimum, these two bills will add \$2.5-billion to the authorized total. They will probably add \$4-billion.

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1. Easier handling for supplier.
2. Demurrage on carriers eliminated.
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 - b) Work positioned to minimize re-handling.
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LABOR



Unemployment Shows Up All Over

Labor Dept. says it's only temporary, will pick up soon. But CIO says it's a long-term problem and needs federal aid.

Unemployment is at a new postwar peak. A midwinter spurt in unemployment has carried the total to a level only 2-million less than the total during 1937. On the last official reckoning day, in mid-February, 4,680,000 were jobless. Even union people are worried.

The nation's unemployment map gives you some idea of the general worsening of the labor market. It shows "very substantial" (12% or over) unemployment in 43 of 163 national labor-market areas; "substantial" (7% to 11.9%) unemployment in 83 of the 163 areas. That adds up to a serious situation in 126 of 163 labor-market areas.

That's in contrast with only one labor-market area (South Bend, Ind.) with less than 3% unemployment and 36 areas with 3% to 7% unemployment.

Current joblessness is pinching most in the Northeast and West—although the West hasn't quite fallen into the "very substantial" unemployment class. Employment is holding up best in

North Central, South Atlantic, and South Central states. Most of the labor-market areas in these regions are classed as "slight-to-moderate" in unemployment.

That, in general, is the national unemployment picture which the Dept. of Commerce and Labor Dept. call "seasonal" joblessness—but labor unions call a "critical, nonseasonal growth of unemployment."

• **More "E" Areas**—The Labor Dept.'s Bureau of Employment Security this week said that "very substantial" labor surpluses existed in 43 so-called "E" areas last Jan. 31. One month earlier the total was 39. During January, BES added seven high-unemployment areas to its list and dropped three: New Britain, Conn.; Fitchburg, Mass.; and Silver City, N. M.

BES reported that the increase in the number of "E" areas in January stemmed mostly from "slight to moderate" increases in unemployment. These were "strongly influenced" by seasonal factors. But nonseasonal layoffs helped

swell unemployment to "very substantial" levels in some markets.

Coal and auto labor disputes, for instance, affected employment in other industries. When 90,000 workers struck at Chrysler, body and parts suppliers and auto dealers laid off more than 20,000 employees. Erratic coal production cut into transportation employment, caused layoffs in industrial plants lacking adequate coal stocks. Labor disputes were a direct cause of "E" listing for at least two of the seven new high-unemployment areas: Toledo (Ohio) and Huntington (W. Va.).

• **Where and Why**—The seven new unemployment-distress areas have one thing in common: Each has had a greater-than-seasonal drop in manufacturing, trade, and construction jobs.

The new names on BES's "E" list and Labor Dept.'s explanation are:

• **Toledo**—The area had acute steel shortage problems at the end of 1949. Just as these eased, unsettled labor conditions in the auto industry caused new industrial troubles. Toledo manufacturers are auto-parts suppliers; so these auto industry labor troubles resulted in heavy layoffs.

• **Cairo, Ill.**—Unemployment began to

skyrocket when the cotton harvest was completed. It reached "very substantial" levels when apparel production declined seasonally and a large shoe factory closed its doors permanently.

• **Huntington, W. Va.**—Secondary effects of erratic work schedules in the coal-mining industry brought on a slow reduction of employment. Transportation equipment was especially hard hit as orders for mining cars were canceled.

• **Bennington, Vt.**—Manufacturing employment dropped, and winter resort employment fell sharply because of mild weather and lack of snow.

• **Atlantic City**—Employment tumbled during a heavier-than-usual winter lull in Atlantic City's big hotel business. Then recently, the number of jobs dropped sharply in apparel mills—the area's major manufacturing industry.

• **Upper Peninsula, Mich.**—BES lists two separate "very substantial labor surplus" areas in the Upper Peninsula region of Michigan. In the lumber area, unemployment became acute when service, transportation, and food processing jobs dropped. In the iron country unemployment had been increasing for some months, finally reached a distress stage in January.

• **Outlook**—According to the Labor Dept., it's encouraging. Robert C. Goodwin, director of BES, says that "both manufacturing and nonmanufacturing employers contacted . . . anticipated employment rises and some declines in unemployment over the next few months."

Construction employment is expected to go up "very sharply." Increases are looked for in both trade and service activities in almost every one of the "E" areas. Gains also are expected in manufacturing industries.

But, warns BES, "although declines in unemployment [are] looked for, a significant reduction in the very substantial labor surpluses in most areas [looks] doubtful."

• **The Union Line**—That's very much like what unions have been saying. Everett N. Kassalow, executive secretary of CIO's Full Employment Committee, warned a congressional committee two months ago that seasonal gains in jobs won't wipe out the country's unemployment problem.

At that time, he testified, 55 out of 100 major U. S. industrial cities reported 7% or more of all workers unemployed. Recently Kassalow revised his estimate; he said that 12% or more are jobless in one-third of the nation's main industrial areas—while "several million [listed as employed] are working only part-time."

CIO economists can't see any "real improvement through mere seasonal upturns in industrial activity." The union wants Congress to step in with a program for relieving unemployment.

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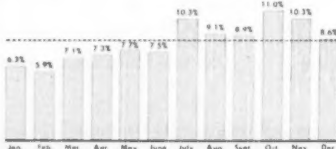
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The OHIO FARMER



UAW'S GOSSER: He sees a day of reckoning coming for Toledo areawide pensions.

Toledo Waits

Once Chrysler settles, Toledo UAW will revive area-wide pension drive. But demands this time will be softer.

"The day the Chrysler strike ends will be a day of reckoning for Toledo companies—on areawide pension demands." That was the word this week from the boss of the United Auto Workers' off-again, on-again regional pension campaign.

• **Narrowed Down**—Richard T. Gosser, vice-president of the CIO auto union, opened his drive for area pensions in Toledo last October with threats and fury (BW-Oct. 29 '49, p. 100). His original scheme was to bring 120 employers in the Toledo area into one big pension fund. Since then, the scope of the campaign has gradually narrowed. The number of employers to be covered now is hardly half the original list.

The amount asked in pensions and insurance dropped, too. And Gosser opened a lot of new loopholes that would let companies slip out of the regional plan, into private pensions.

Then, two weeks ago, Gosser all but wrote the UAW campaign off as a dead issue (BW-Mar. 4 '50, p. 116). But that was in the thick of the coal strike, and while there wasn't a glimmer of hope for a Chrysler settlement.

• **Not Dead, Suspended**—This week, Gosser backtracked a bit. The regional pension drive isn't really dead, he said; it's just in a state of suspension. It will be revived quickly when Chrysler workers get back to the assembly lines.

Gosser's demands will be a little

softer when he returns to active bargaining, though. At first, he wanted employers to add \$68 a month in retirement pay to federal social security; now, he's willing to settle for a flat \$100 a month, with employers paying the difference between social security and that amount.

Gosser also asked originally for a lump-sum fund of \$125 per employee to set up the program on a going basis, and to care for past service credits. Now, he is willing to let employers use a much milder funding system.

These concessions aren't likely to make any chinks in solid management opposition to the Gosser plan. Practically all Toledo UAW contracts expired with 1949. Since then, many Toledo employers have balked at discussing regional pensions with Gosser.

• **Still Pitching**—This week, Gosser made another routine bid for pension bargaining—at Peters Stamping Co. Gosser told Peters the union is "willing to hear and consider" employer pension proposals which "measure up fully to [the union's] arcawide plan."

Meanwhile, UAW continued its strike against the Plaskon Division of Libbey-Owens-Ford (BW—Feb. 11 '50, p97). Plaskon has offered a pension plan similar to that covering other L-O-F workers. But, UAW insists that Plaskon settle on basic wage and working-condition issues before talking turkey on pensions.

Sell the Wives, Not the Workers

United Steelworkers (CIO) in Cleveland has decided that it has been underestimating the power of a woman. A recent join-the-union ad campaign fizzled out completely. USW's regional director, Bill Donovan, now thinks that the campaign failed because the message didn't hit the workers' wives.

• **Why Wives?**—Why the wives, specifically? Donovan thinks they are holding back husbands who otherwise would sign union cards. According to Donovan, the wives are convinced that wages for unorganized workers keep step with those for union members. And they complain that joining a union might mean having to go on strike or it might mean getting in bad with the boss, maybe losing a good job.

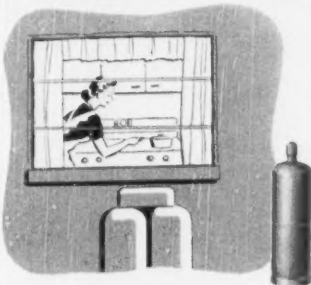
• **Dead End**—USW started its abortive organizing campaign through newspaper advertising (BW—Jan. 21 '50, p102). It inserted an \$85 ad in The Plain Dealer to tell unorganized workers to join this union.

Now USW regional director Bill Donovan is looking for some new gimmick aimed to reach the wives of unorganized workers.



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By modern chemical extinguishers. This Hackney Deep Drawn Shape—lighter weight, stronger, more economical—plays an important part in their efficient operation.

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markets

You see here only a few of the many industries served by Pressed Steel Tank Company. Vastly diversified? Yes, but one thing they share in common—the advantages of Hackney Deep Drawing—light weight, greater strength, longer life, improved appearance, etc. These important advantages profit all users of Hackney products, whether they use cylinders, drums, barrels, kegs or special shapes and shells.

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Who's a Learner?

Wage-hour administrator lays down strict rules to govern cases when you can pay less than the 75¢ minimum wage.

When is a new employee a "learner," and when is he just a new employee? It can make up to 20¢-an-hour difference. And that's enough to be important, especially to low-pay industries with high labor turnover.

A learner is exempt from the 75¢ minimum wage requirement of the Fair Labor Standards Act. His employer may pay him less than 75¢ an hour (but not less than 55¢) during his first 480 hours on the payroll.

• **Strict Interpretation**—The wage-hour division of the Labor Dept. has the authority to say who is a learner and to issue the permits for subminimum wages. But an employer has to have a strong case to get approval for a learner rate.

This week, William McComb, wage-hour administrator, drew sharp limits on learner certificates. He announced that:

(1) Not more than 10% of the workers in a plant may be paid learner rates.

(2) Custodial, unskilled maintenance, supervisory, office, and clerical workers can't be listed as learners.

(3) Where piece rates are paid, learners must get the same rate as experienced workers.

(4) No wages can be less than those required by state laws, the Walsh-Healey act, and union contracts.

(5) An employer may not hire learners, at the lower rate, if experienced workers are available.

(6) In every case, learner permits are temporary, and subject to revision.

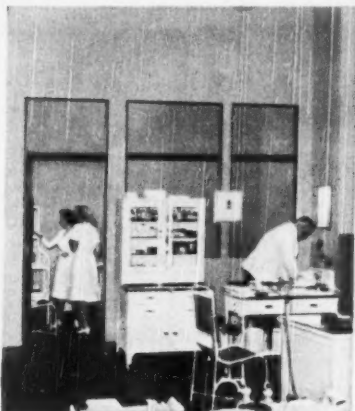
• **Snowing Applications**—A few days earlier, McComb told an employers' association meeting that his office is looking into a number of "disturbing" charges by unions. Without being specific, he referred to complaints that "employers seeking to avoid paying the 75¢ minimum . . . have snowed the wage-hour agency under with applications for exemptions."

• **Learner Permits**—So far, the wage-hour division has issued learner certificates for the shoe industry and parts of the apparel industry, for some independent telephone companies, and for glove, hosiery, furniture, and a few box, cigar, and candy companies.

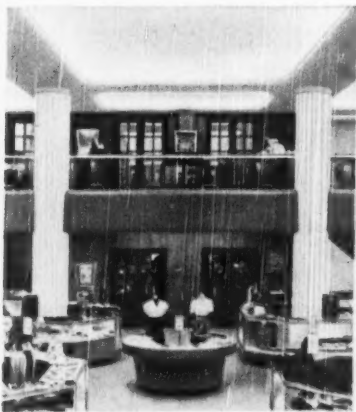
In general, these permit subminimum payments of 60¢ to 70¢ for learners—instead of the 30¢ and 35¢ learner rates permitted when the legal minimum was 40¢.



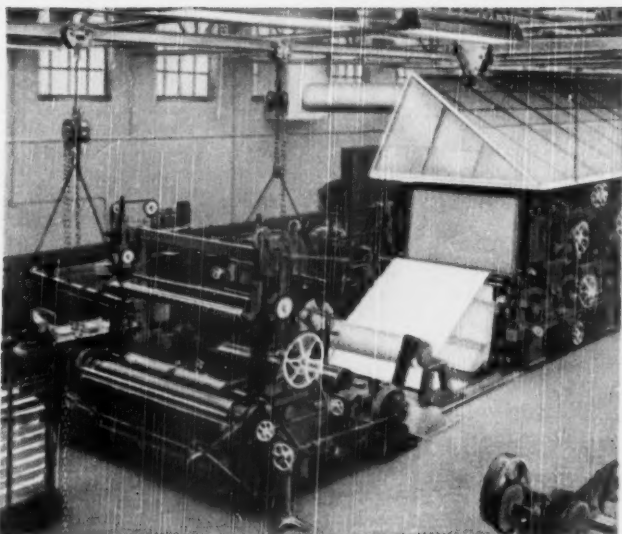
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Du Pont Color Conditioning Gives You More for Your Money ... on any interior!

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tioning puts color to work ... to attract more patronage, sell more merchandise.

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(Check Material Wanted)

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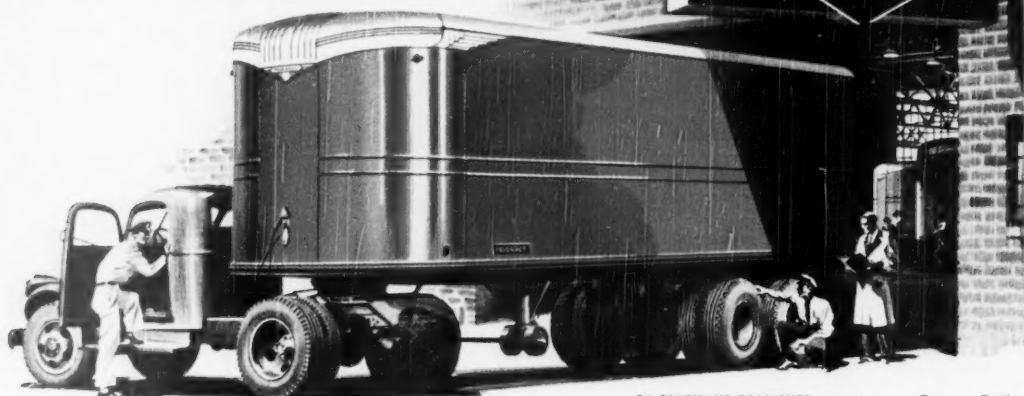
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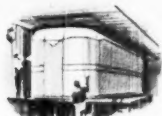
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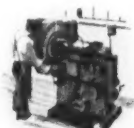
2 **BODY REPAIR**—Fruehauf repairs everything—from a dented panel to a complete wreck. Damaged Trailer or Truck Bodies—wood, stainless steel, any metal—are handled with the same dependable, time-saving efficiency.



3 **PAINTING**—Factory-trained painters, using special paint spray booths, give Trailers, Truck Bodies and buses a smooth, sparkling paint job . . . put on right, to stay on under the most extreme hauling conditions.



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5 **BRAKE REPAIR**—"Brake Doctors," special machines to give you "factory rebuilt" brakes, are standard equipment in all Branches. This "factory rebuilding" assures smooth stops with the heaviest loads.



6 **MACHINE SHOP FACILITIES**—Fruehauf Branches maintain machine shops for fabrication of special parts to "factory specifications"—important where repair work requires individualized parts.

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FEDERAL CONCILIATOR Cyrus Ching and UAW president Walter Reuther take a new look at Chrysler strike after . . .

Ford, Nash Pension Deals

Ford got what it wanted—variable pension payments—from UAW. But the union won fixed payments at Nash. Chrysler and GM settlements will probably follow the pattern set at Ford.

The labor picture in Detroit is finally clearing up. Ford and Nash have reached agreements with CIO's United Auto Workers that may pave the way for (1) a quick end of the two-month-old Chrysler strike, and (2) eventual peaceful settlement of negotiations at General Motors.

The big question has been: How will pensions be paid for? It is the major issue of the Chrysler strike. It is a factor at Ford and General Motors, too. In fact, somebody in Detroit recently said that the Chrysler strike was directed "one-third against Chrysler, one-third against Ford, and one-third against General Motors."

At Ford, UAW and the company finally wrote their pension-payment clause last week. It provides a flexible system of payment—with the requirement that Ford maintain an adequate fund, certified once a year by an actuary. UAW had first demanded a flat fund payment of 8½¢ per hour worked.

At Nash, UAW and three other unions the company deals with got a contract calling for a fixed payment into the fund (10¢ per hour worked).

But chances are that it will be the Ford deal, and not the one at Nash, that will set the pace for Chrysler and GM. The Ford formula will probably compel some ground giving on both sides at Chrysler—withdrawing of the union demand for fixed cents-per-hour contributions, and the company re-

fusal to trustee the plan and make actuarial guarantees.

The Ford agreement came last week after negotiators worked until dawn for three nights in a row. It took them that long to do a complete rewrite of the preliminary pension "memorandum" prepared in contract negotiations last fall.

The argument: The original preliminary pact had a provision for payment of 8½¢ per hour worked into the fund for the five-year term of the contract. UAW wanted that figure included in the final agreement. Ford—as well as Chrysler and others—held the position that no fixed sum was required, that it could vary payments to fit circumstances.

Gist of the decision: Ford will pay into the fund enough to sustain it adequately—and an actuarial certificate once a year will attest to the adequacy, based on a maximum funding period of 30 years. If social security benefits are enlarged, then the company can reduce the funding period, and reduce payments, too.

But if Ford does change the funding period term—which, of course, would affect payments—the company must notify the union of the amount of that change in cents per hour. This way the union can talk cents-per-hour benefits in future wage demands.

The agreement did not mention specific amounts—except that it referred

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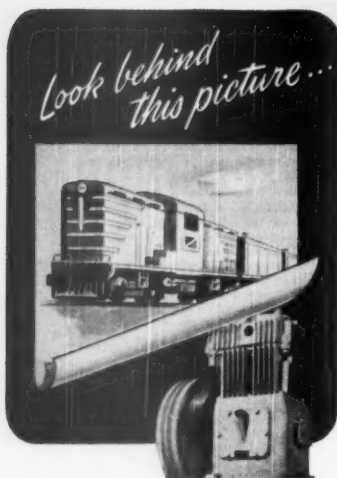
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to the original statement of last fall, which did contain the 8½¢ figure. But unimpeachable word from the conference said that Ford promised the union it would deposit that amount into the pension fund throughout 1950—at least while social security benefits continued unchanged.

Ford was pleased. The company said it confirmed its understanding of the original agreement. Union people had less to say. But they indicated that they had no case for an 8½¢ guarantee after the steel workers settled without a flat guarantee.

• **Vested Interest**—Unionists were more ready to talk about the Nash deal, written 24 hours before the Ford pension agreement was finalized. UAW and three smaller unions wrote identical contracts calling for a fixed company payment into a pension fund. These contracts also set some sort of precedent for noncontributory plans by providing for a form of vesting (employee-owned shares of the fund).

Vesting is commonplace in contributory plans, in which the worker can always get his contribution out, usually plus interest. But there has been no vesting of any sort in major noncontributory plans signed in recent months—if the employee leaves the company or dies before he becomes eligible for a pension under these agreements, the money deposited for his benefit reverts to the company.

There's no formal mention of vesting in the Nash agreement draft. But it says that if the plan is discontinued, the trustee has the power to determine the crediting of the available funds to employees of the company, in proportion to their service credits. Such crediting would come after providing for continued pensions for those already retired at the time.

• **Amount**—Nash will put 7¢ an hour into the fund for the five-year term, starting next July 1. It will also spend an estimated 0.4¢ for administration of the fund, plus 2.6¢ for insurance benefits—10¢ in all. This will pay for \$100-a-month pensions, social security included, for men of 65 and 25-year seniority.

The Nash agreement provides that future credits will include hours at the rate of 40 a week for men on leave of absence due to illness or union business. A year's credit will be granted in the future for any year in which 1,700 hours are worked. Past service credits are based on the higher of either service or seniority—thus a man who worked for the company at two distinct periods and lost his seniority after the first period would be credited for that initial time in figuring his pension eligibility.

At General Motors, study committees are working on pension problems to

get set for the start of negotiations next month. But the tension at GM—noticeable since the Chrysler strike began—appeared to be easing. The general belief is that the auto workers' behavior at Ford would aid in reaching a solution at GM.

Wide open at General Motors, though, is the thorny problem of the union shop. The union has made known that it will press hard for that kind of security; GM has made it equally plain in the past that its policy is dead set against it. The demand may ultimately turn out to be a trading point for both sides—although it still can be the most critical in the bargaining.

LABOR BRIEFS

CIO Steelworkers' convention in Atlantic City beginning May 9 is worth a close watch: It may give a preview of CIO bargaining objectives for 1950.

• **UE is suing** General Electric for \$1.5-million on behalf of 31 of its members allegedly suffering from occupational silicosis. Some cynics think this is a bargaining gambit that UE will trade off later in contract negotiations.

• **Rights of the individual** in labor organizations will be studied by the American Civil Liberties Union. A finding of antidemocratic union practices by this source could have serious repercussions.

• **Labor leaders** are up in arms over the Immigration Bureau's treatment of anti-Communist union officials. They say right-wing union delegates get held up on Ellis Island. A joint AFL-CIO committee will try to see Truman.

• **Employee rule-breaking** is no cause for dismissal unless workers have been furnished with copies of the union contract. That's what a federal court held in a case involving Washington Terminal Co., Washington, D. C.

The Pictures—Cover by Dick Wolters; Acme—108, 134 (bot.); Grif Davis—136, 137, 138; Arnold Eagle, Standard Oil (N. J.)—22 (3), 23 (bot.); Eastern—92, 93; Harris & Ewing—21 (lt., rt.), 102; Int. News—21 (cen.), 83; Sovfoto—133, 134 (top); Dick Wolters—58; Wide World—20, 24, 54, 56, 80, 113, 115.



EXPULSED UMW OFFICER Lloyd Sidener of Canton, Ill., claims John L. Lewis kept the coal strike going with "secret signals." If an FBI investigation substantiates the charges, it's still possible . . .

Lewis May Lose

Justice Dept. is torn six ways but is pushing its appeal of UMW's injunction victory. But few expect case to stand up.

Questions of law raised by the coal strike still aren't settled. The injunction against the United Mine Workers Union encouraging or continuing the strike remains in effect. A layman's puzzlement over this latest quirk in a queer proceeding is matched only by the degree of confusion found in the Dept. of Justice. The department, it seems apparent, feels that there is some political necessity to keep the Lewis case alive.

• **Investigate, Appeal**—This week the Justice Dept. made two overt moves:

• It put the FBI to work sifting charges made by a dissident local UMW official in Illinois. Lloyd Sidener charged that Lewis—despite his ostensible observance of the injunction—had "secretly signaled" the continuation of the coal strike.

• It filed a brief with the circuit court of appeals in Washington asking that the lower court decision in favor of UMW be reversed—pleading that Judge Keech's ruling "ignores reality."

• **Embers**—These two actions seemed to be straightforward enough and consistent. But under the surface, politics were blowing the coal strike's embers first hot, then cold, then hot again.

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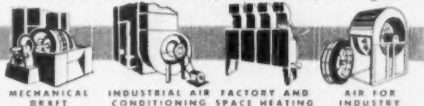
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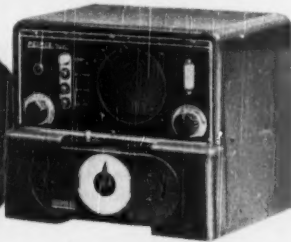


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torney-General McGrath was a man impaled on three forked horns:

Horn 1. He wanted to do nothing to rehabilitate the Taft-Hartley act. But he knew the Republicans had powerful campaign ammunition in Truman's failure to bring the coal strike to an end. Winning his appeal would weaken a little the opposition charge that the law hadn't been used right. It would also strengthen Taft-Hartley.

Horn 2. He wanted to do nothing which might upset the painfully achieved labor peace in the coal fields. Yet he has to go through the motions of proving the Justice Dept. isn't playing doggo in the case. Victory on the appeal—and the punishment of the union which could follow—might set off another coal strike. Defeat might spread the idea that McGrath is not one of the great attorney-generals.

Horn 3. He has to bow to the public distaste for Lewis's adventurism and preserve the theory that the Administration isn't afraid to stand up to the man. In actual fact, the Administration wants to mix with him just about as much as it wants to meet Stalin and Molotov in a Kremlin conference.

With these factors in the background, it would be a near-miracle if the department's scrambling in any direction made any traction. But foes of Lewis were comforting themselves with the thought that the FBI has a reputation for achieving near-miracles.

• **New Trial?**—New evidence proving that Lewis, as UMW operating head, violated the injunction could mean a new trial. The principle of double jeopardy does not apply to civil suits. Keech, or some other judge, may have to try anew the government's claim of civil contempt. If the FBI comes up with something, McGrath will be hard put not to take it to another trial.

FBI agents are looking for facts to sustain Sidener's accusations. Sidener charges that he lost his union office and his job in the mine and was fined \$50,000 by the union for attempting to lead a back-to-work movement during the strike. More important, however, Sidener asserts that word from Lewis to keep the walkout going percolated down through the district leadership in Illinois, despite Lewis-signed telegrams ordering the miners back.

• **Old Stuff**—Those with long memories of Lewis's career could recall that more than once some figure out of favor with the union administration claimed to have the goods on the UMW president. But, invariably, the charges either failed to stand up or never got pushed. There wasn't too much optimism about these charges being any different.

But, so far as is publicly known, this is the first time the FBI has tackled a Lewis case. That may—it's just possible—make a difference.

Cure the Cause

California company uses "preventive mediation" to forestall labor trouble. Labor-management meetings do the trick.

Interstate Engineering Corp., a California manufacturer, thinks it has found something new under the labor-relations sun: "preventive mediation." In seven months, the system has (1) prevented a strike, (2) kept the company in business, and (3) now promises labor peace for a long time to come.

• **Parleys**—Like preventive medicine, preventive mediation is designed to get rid of the causes of trouble before trouble starts. Basically, the method calls for continuing parleys between labor and management. An impartial adviser meets frequently with both sides, and is available for emergencies.

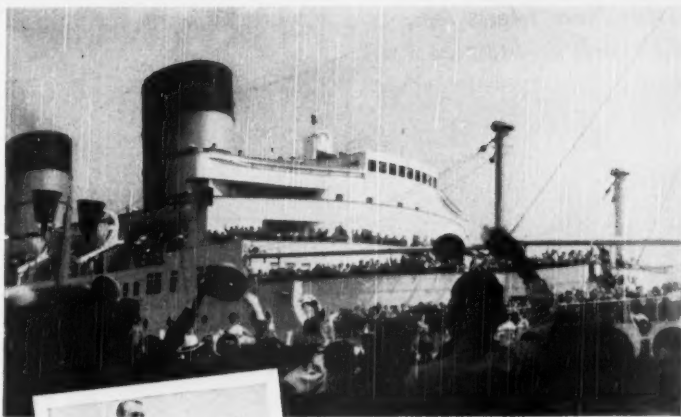
The technique was developed by Dr. Paul Prasow, professor of industrial relations at the University of Southern California. Interstate Engineering retained Prasow as an impartial adviser last August when it saw trouble coming with its union, the International Assn. of Machinists, Aeronautical & Industrial Lodge 720.

First thing, Prasow started regular meetings between company and union officers. He got them airing the problems of seniority, transfers, layoffs, etc.—and also management's headaches: production, costs, and competitive bidding. Soon workers and bosses were talking each others' language. That cleared a lot of distrust.

• **Payoff**—The payoff came last December, four months after the experiment began. Bargaining for a new contract was scheduled for this spring. And the union was free to call a strike on May 15, if negotiations failed. But the company knew that unless it could be assured of labor peace this spring and summer, it couldn't close any long-term orders for business. (Two years before, a prolonged strike not only kept the company from making long-term contracts, but also nearly forced it to sell the plant.)

Prasow presented the company's dilemma to the union. Instead of holding off for three months, the union took up contract negotiations right away. It promised that there would be no strike, that it would make no demands for wage increases, or other benefits affecting costs until May, 1951. It asked no concessions in return.

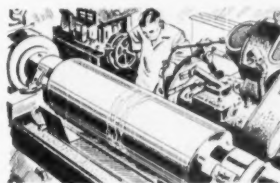
• **Carry On**—L. D. Fedderman, Interstate Engineering's president, thinks that the joint-meeting idea worked so well that he has decided to continue the get-together on a weekly basis.



LET'S LISTEN IN while Howard Stone answers a question his 8-year-old son Bruce might ask on seeing the Mauretania sail for Europe. Howard knows how. He has worked at Norton for 11 years, where one out of every two employees has more than 10 years' service.

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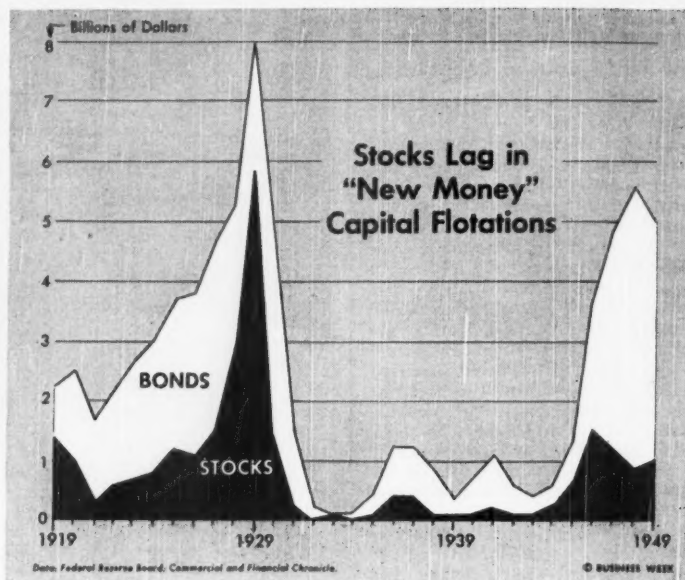
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Next Clues section in April 1 issue

FINANCE



Are Stockholders Necessary?

McGraw-Hill survey finds channeling of savings into institutions poses threat of shortage of risk capital within a few years. More and more companies have to rely on debt financing.

Are we up against a definite shortage of risk capital?

It's a much debated question. Some economists don't think we face any really serious shortage. Others, and there are more of them, think we do. Wall Street, for one, has long insisted that the supply of venture capital is drying up, and that the economy may soon face a full-fledged drought.

• **Danger Flag**—This week another source sounded a warning. In a study called *Business Needs for Venture Capital*, the McGraw-Hill Dept. of Economics stated: "Business will not be able to raise the venture capital it needs, unless prompt steps are taken to increase the flow of venture capital." As prompt steps, it prescribed uncovering new sources of risk money and developing new financing methods.

A McGraw-Hill study drums home the point that the state of risk capital is of crucial importance to the entire country. "At stake are our chances of maintaining prosperity and raising living standards. The U.S. needs to sustain business capital expenditures at a high level." This can only be done if business receives "a steady flow of

capital funds, including an adequate supply of venture capital."

In short, it's the old maxim that as capital spending goes, so goes prosperity.

• **Old Standbys**—In the past, American corporations have relied on four main sources of financing: (1) depreciation charges; (2) retained earnings; (3) borrowings from banks or sales of debt obligations; and (4) sales of new preferred and common stock issues.

Normally, "outside" venture capital—secured through the sale of new stock—has played a key role. Along with retained earnings, permanent new equity capital has traditionally supplied the bulk of funds needed for financing new companies, or financing new ventures by already established concerns.

New stock sales have also had another important function. Through them corporations have built up the cushion they need to support business borrowings. For bankers and investors are leery about lending to companies that don't have an adequate margin of equity money in their capital structure.

• **Cut in Half**—In the prosperous mid-1920's, risk-capital investments by the

public provided over 20% of all the funds that business needed for its capital spending.

Today, sales of new stock make up less than 10% of the huge sums that business has been putting into new plants and equipment. To take care of expansion costs, many corporations have had to retain an abnormally large share of earnings and borrow heavily besides.

The impact of borrowing on the general capital structure hasn't reached any dangerous proportion, yet. But the trend hasn't been healthy.

• **Cases**—Take the nation's manufacturing companies. A short while ago, New York's National City Bank estimated that, from 1939 to 1948, manufacturers' debt loads rose about 138%, while the equity interest of their stockholders had gone up only 76%. The proportion of debt to the stockholders' equity had advanced from 34% to 46%.

Nonmanufacturing corporations, too, the McGraw-Hill survey points out, have relied more heavily on debt financing in the postwar years than they did prewar. "Many companies have reached, or are nearing, the safe limit of their borrowing capacity . . . [and] need additional venture capital to maintain their capital expenditures at a high level."

• **The Causes**—What has hampered the sale of new stock? A number of factors, and they are all interrelated.

For one thing, a far greater share of the national income than ever before has been going to farmers and workers. Neither of these groups is accustomed to investing funds.

As a result, we have seen more and more savings go into institutional hands. Money has been channeled into life and unemployment insurance, old age pensions, savings and loan association shares, Treasury savings bonds, and savings bank accounts.

It's true that all these are good investment mediums. Nevertheless, their popularity has had a definite effect on the economy. For, by law or policy, when you hand money into the keeping of the life insurance companies or savings banks, they must eventually invest the cash in strictly "legal" investments—government issues, corporate debt obligations, real estate or mortgages.

• **Taxes**—The shift in the income-distribution pattern has gone hand in hand with a sharp rise in income and inheritance tax rates. This combination has had a sharp impact on another section of the economy. It has changed the savings and investment habits of people who make more than \$10,000 a year—the group that normally provides corporations with most of their equity capital. These people no longer



"February's profits have just gone out the window, Mr. Jones"

Profits do tend to disappear when comfort inside depends upon the weather outside. The breeze that invigorates Mr. Jones may send Miss Gray home with the sniffles. And through that open window pour the strident street noises that have Miss Murdoch in a dither . . . the dust and dirt that are the real reason the janitor is overworked and needs an assistant.

Yes, healthful, invigorating indoor weather—the kind that Carrier Air Conditioning supplies all year round—is a good investment. Surveys show that it helps workers maintain steady production season in and season out, and that it also helps reduce absenteeism, turnover and errors.

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March 16, 1950

277,978 Shares Commercial Credit Company Common Stock (\$10 Par Value)

The Company has called for redemption all outstanding shares of its 3.60% Cumulative Preferred Stock, each share of which is convertible into 1 $\frac{3}{4}$ shares of Common Stock. The Underwriters named in the Prospectus have severally agreed, subject to certain conditions, to purchase such of the above shares (which have been reserved for issuance upon such conversion) as are not so issued prior to the expiration of the conversion privilege on April 4, 1950.

Prior to and after the expiration of the conversion privilege of the 3.60% Cumulative Preferred Stock, the several Underwriters may offer and sell Common Stock as set forth in the Prospectus.

Copies of the Prospectus may be obtained from any of the several underwriters, including the undersigned, only in States in which such underwriters are qualified to act as dealers in securities and in which such Prospectus may legally be distributed.

The First Boston Corporation

Kidder, Peabody & Co.

have as much money, or as much inclination, as they once did to buy new stock offerings.

At the same time that high income-tax rates have cut the amount of money they have to invest, taxes have taken much of the profit out of equity-issue investments. High inheritance-tax rates have also made many prefer to keep a bigger part of their savings, or estates, in holdings that are more liquid and safer than stocks.

The McGraw-Hill survey estimates that only about 12% of people's savings has been going into "business investment" since World War II. And it points out that "this is a far cry from the era of the 1920's when . . . half of people's savings were invested in business."

• **Demand Suffers**—Obviously, the upshot of all this has been a lack of demand for new equity offerings. This, in turn, has made it extremely expensive for most companies to sell stock.

For to issue new stock, the survey points out, "most companies would have to accept a price equal to only some 5 or 6 times earnings." In most cases, too, that would mean sales of new shares at a price below book value.

• **Cloth and Purses**—Why haven't companies cut the cloth to suit the purse in their postwar expansion plans? They could have financed moderate expansion entirely out of retained earnings and depreciation charges. Instead, they went into hock and sold debt obligations. How come?

The answer is fairly easy:

• **Business generally needs plenty of new equipment** despite what the survey calls "the widespread illusion that . . . [we] are very well equipped industrially." Half our coke ovens are over 20 years old; 33% of our freight cars were built over 25 years ago; almost half our machine tools are over 10 years old, and about 20% have been in service more than 20 years.

• **New equipment, business has learned from experience, is a highly profitable investment.** Its use cuts operating costs sharply, and most new machines pay for themselves in jig time.

• **Because of high corporate-tax rates, the government's easy-money policy, and the tremendous demand for corporate debt obligations** from institutional investors, debt financing has become most attractive. Interest rates have slipped to historic lows. And interest payments of a corporation are a deductible expense for taxes. Dividend payments are not.

• **Outlook**—Will an over-all shortage of investment money develop in the next few years? The survey's findings aren't too hopeful. It foresees an adequate over-all supply in a "year of post-war normal prosperity" only if:

(1) Corporate profits do not decline

more than 10% from their 1949 first-half level;

(2) Capital expenditures do not exceed \$18-billion a year (they were \$15.5-billion in 1946; \$20.5-billion in 1947; \$24.1-billion in 1948);

(3) Business continues to plough back half or more of its earnings after taxes.

Moreover, the survey adds, "an over-all shortage of investment funds may develop if the key assumptions stated above are incorrect, even by relatively small margins."

There is "a real possibility that an over-all shortage of venture capital will develop within a few years."

Such a shortage would mean that many, if not most, companies would have to pass up opportunities for investments that could save costs and improve quality. And, says the survey, a shortage "means that companies must pass up many attractive opportunities to develop new products. It also points to a substantial reduction in business capital expenditures of the sort that has always gone hand-in-hand with declining business. Thus . . . [it] poses a major test to the United States."

GM's Acceptance Corp. Details Financing Plans

This week General Motors Acceptance Corp. gave out the details of its new financing (BW—Mar. 18 '50, p. 112). The company will up its capital structure by \$225-million "to meet anticipated demands for instalment financing in the near future."

GMAC will raise the money in three ways. It will:

(1) Sell \$25-million of 3½% preferred stock to its parent, General Motors Corp.

(2) Sell \$25-million of subordinated notes to the same insurance companies which took \$75-million of 3% subordinated 10-year notes last fall.

(3) Sell up to \$175-million of new five-year 2½% debentures to depository banks.

A group of depositories that had previously made big loans to GMAC got a ruling from the Comptroller of the Currency allowing them to purchase new debt obligations from GMAC that would not count as part of the "10% limit." National banks are not permitted to extend loans amounting to more than 10% of their capital funds to a single borrower.

But they are allowed to buy the "investment securities" of the same borrower up to 10% of capital funds, provided the securities are marketable. The Comptroller ruled that GMAC securities were marketable, even though they were purchased privately.



For easy handling of the tiny tobacco seeds, the metal ridge roll on the roof of the barn slides to permit easy pouring and tight closing.

Miniature Paperboard Tobacco Barns show how a back-shelf item can win up-front display

You can probably think of an arm-long list of products (all in traditional, unimaginative packages) that wind up on back shelves and in dark corners—just as tobacco seed always did.

McNair's Yield-Tested Seed Company thought something could be done about it. So did Gardner. And Gardner designers found the answer, right in the McNair slogan—"The bargain is in the barn." They came up with tiny "tobacco barn" seed packages. A larger paperboard barn became an eye-

catching display—and a container for a reserve supply of seed packages.

These intriguing barns have won special island and top-of-counter display in seed stores. Result: extra sales for McNair's.

Maybe we can add a Sales "Extra" to YOUR package

If you have a product that needs an extra point-of-sales push, a product that's hard to package, or a new idea that needs a new packaging idea, get in touch with Gardner. We'll be glad to tackle it. No obligation, of course.

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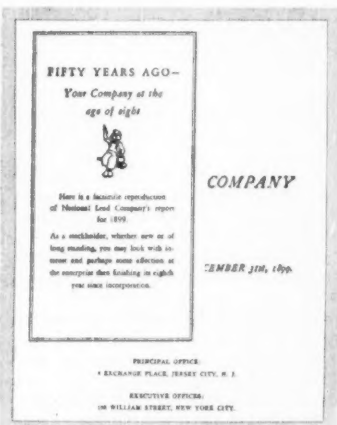
One equipment trust that failed was Florida East Coast Rwy.'s. Certificate holders end with 70¢ on the dollar.

Railroad equipment trust issues have an enviable safety record. Holders of equipment trust certificates actually own the equipment that secures them—until the certificates are paid off (BW—Jan. 1 '49, p. 49). And because the equipment pays for itself in a relatively short time, the issuer has what amounts to a self-liquidating debt.

But Wall Street has just been reminded that even the equipment trust pocket can have holes. It has finally written off the case of Florida East Coast Rwy. Co. as one such trust that went sour. This month's settlement brought certificate holders' take to a total of roughly \$700,000 on an investment of \$1-million.

• **Background**—During the Florida boom of the 1920's, the railway over-expanded. In that decade, the New York Trust Co., as trustee, issued \$1-million in equipment trust certificates for Florida East Coast. This money paid for new equipment—which was owned by the certificate holders. The railway paid rental on it to the trustee.

Then came the 30's, and trouble. In



Report—1899 Style

Annual reports have come a long way. When National Lead Co. issued its 58th last week, it inserted a reproduction of its report for 1899. The old one carried only three pages of information on the year's operations, and included a very brief balance sheet. In contrast, the 1949 report had 36 pages of detailed information.

1931, Florida East Coast went into receivership, later into reorganization. In 1936, the road's receivers "disaffirmed" its Series D equipment-trust lease. They told the holders of the certificates that the road no longer wanted to lease the rolling stock (steam locomotives, in this case), and that the legal owners could come and get it.

That was the first time an equipment trust had been disaffirmed since the 1880's. Even a bankrupt railroad ordinarily needs its equipment. But the receivers wanted to unload some of its excess motive power.

Years of law suits followed. Final settlement came this month. The New York Trust collected for the certificate holders 25% of the \$487,000 still due them—or \$120,000.

• **Previous Settlements**—That \$120,000 doesn't represent all the certificate holders got for their million dollars. They had sold their equipment collateral to other railroads in 1936 for \$464,000, less expenses. Then they sued the road's receivers on two counts: (1) for use of the equipment from the time the road stopped making payments under the lease until the time the lease was disaffirmed; and (2) for failure to maintain the equipment adequately. This suit brought them another \$305,000, less expenses, when it was settled in 1943.

That still left the \$487,000 dangling. This included the balance of the \$1-million, plus unpaid interest. The \$120,000 they got out of this last settlement leaves them still some \$300,000 shy of their original investment, after all the costs of legal battle were met.

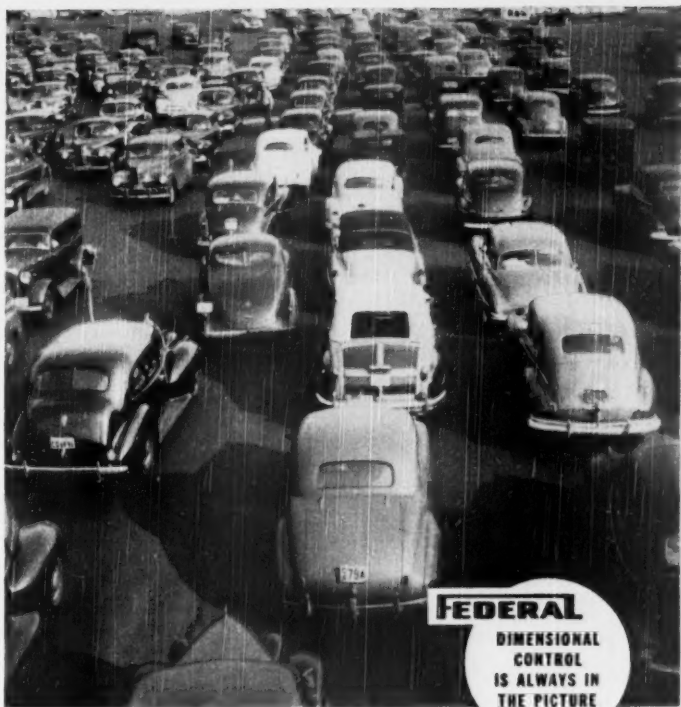
They came close to not getting the \$120,000. Holders of Florida East Coast's mortgage bonds contended that their mortgage liens covered all the road's assets. But certificate holders were able to prove that part of the assets were not subject to this lien. So they collected a quarter of what was due them.

Who Pays the Premium For Sesqui Coverage?

Sponsors of Washington, D. C.'s 1951 sesqui-centennial celebration have run into an awkward legal tangle. Nobody seems to know whether the Sesqui-Centennial Commission, which will run the show, is a private or a government setup. A sizable premium for the insurance industry hangs on the answer.

• **Either, Or**—If the commission is a federal agency, it can't carry commercial liability and fire insurance. The government usually self-insures its own agencies.

But if the commission is a private



Even good guesses would be bad!

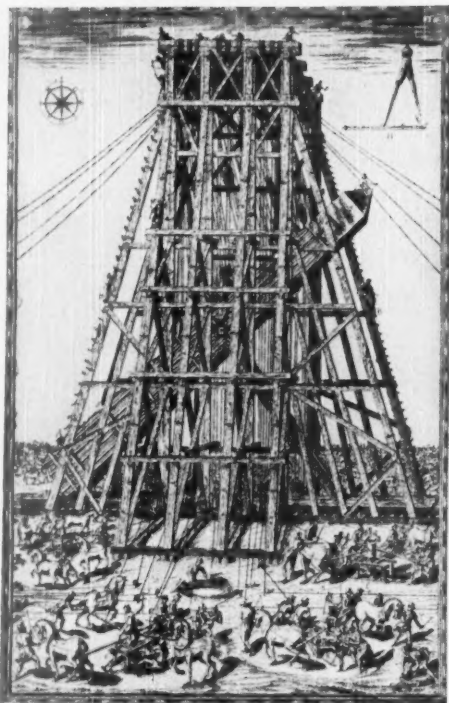
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*Erection of the Obelisk on the Plaza in front of St. Peter's, 1586.
From an old print.*

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organization, President Truman and other members of the commission would be individually liable for damage suits. The commission would have to raise its own funds to protect its members.

Trouble is that the legislation creating the commission failed to define whether the commission was to be a private or a government instrument. Because of the insurance angle, it may be necessary to put a separate piece of legislation through Congress to define the status of the setup.

• **Way Out?**—In the meantime, a special committee of Washington Insurance men has been formed to try to find a way out of the snarl. The committee is headed by Albert Jordan, insurance superintendent of the district.

FINANCE BRIEFS

Cyrus Eaton's Otis & Co. appealed to SEC to set aside the suspension order of the National Assn. of Securities Dealers (BW-Mar. 4 '50, p. 20). The suspension takes effect Apr. 29—unless the Cleveland firm tells NASD what happened when the Kaiser-Frazer stock offering blew up two years ago.

• Otis is also under fire from minority stockholders of Portsmouth Steel Corp., which it controls. Last week a group of Philadelphia stockholders joined others who are trying to liquidate Portsmouth's assets (BW-Feb. 4 '50, p. 78).

• Armour & Co. made about \$5.6-million in its fiscal quarter ended Jan. 28. In the same period a year ago, it lost about \$2.9-million.

• Talk of a stock split was the reason for the zoom in Allied Chemical shares last week, Wall Street thinks. Allied stock got as high as \$20.50 above the previous week's close. It finished at \$219.50, up \$11.

• First profits since 1945 showed up last year for Consolidated Vultee Aircraft Corp. It made \$3.7-million, against a loss of about \$12-million in 1948.

• Schering Corp., the pharmaceutical company taken over by the government during the war, will soon be offered for sale by the Alien Property Custodian. Schering earned over \$1.7-million in 1949 on sales of \$14.8-million.

• Only big stock issue in years of a closed-end trust went over well last week, says syndicate manager Stone & Webster. The issue: 1.5-million shares of General Public Service Corp.

Housing Flop

Seattle project, financed under Sec. 608, faces foreclosure. Poor rentals, high operating costs are reasons.

There are occasional weak spots even in today's booming market for housing. Near Seattle, Wash., a \$4.1-million housing project financed under Section 608 of the National Housing Act is going through the wringer.

• **Foreclosure**—Sun Life Assurance Co. of Canada, which loaned money to the project, has announced it will foreclose on its 4% government-guaranteed mortgage. Sun would then offer the deed to FHA, which is required to give the company government housing debentures covering 99% of the unpaid balance of the mortgage. Debentures would pay 24%.

When the foreclosure goes through, it will be only about the tenth failure out of 5,500 projects built under Section 608.

Section 608 is a part of the housing act, dating from war days, which gives easy financing terms to builders of residential housing projects. Under it, FHA insured up to 90% of the cost of construction.

The Seattle project, known as Lake Burien Heights, is a garden-court development with 544 apartment units. Completed in mid-1948, it has never had more than 486 units rented. Last week, only 329 were rented. The project has been in default on interest since December.

• **Trouble**—What went wrong? For one thing, the apartments were heated with manufactured gas. Since the last two winters have been abnormally severe for Seattle, tenants' gas bills for heating and cooking went as high as \$30 a month. That hurt. Beginning Feb. 1, the management assumed part of this expense.

Another thing was the fact that the project was 15 mi. outside Seattle. There was no direct bus connection to the nearest major industrial plant—Boeing Airplane Co. (Employment at Boeing, which turned down during the year, left some tenants out of jobs. That, too, hurt occupancy.) And since Lake Burien Heights was built, a number of other "608" projects have been completed in nearer, better locations.

• **Little Hope**—On Mar. 1, the project management cut rentals below that of comparable accommodations. Occupancy did go up. But at lower rates and with absorption of the high cost for heating, the management figures that the project cannot pay off even if filled up.



"Oh-h-h-h, you...you...!!"

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Distributorships still open in certain areas

From Real Estate to Industry

Mutual Life's new president, Louis Dawson, helped shift its portfolio from mortgages and rails into industrial bonds.

Businessmen on the prowl for capital are increasingly thankful for the big life insurance companies. More and more, these savings institutions have been turning to industry as a place to invest their money.

• **Shift**—What has happened at Mutual Life Insurance Co. of New York tells the story of at least one company's change of policy. Mutual Life has become one of the nation's biggest lenders to business. One good reason: its new president, Louis W. Dawson (cover). He is the 53-year-old lawyer who has been running the company since president Alexander E. Patterson died in 1948. Dawson had been vice-president and general counsel since 1938, became executive vice-president last year. He is at least partly responsible for the company's "reform" investment policy.

Lewis W. Douglas, U. S. ambassador to Britain, will continue as Mutual Life's board chairman, on leave without pay. Douglas was president of Mutual Life until 1947, when he took the diplomatic post. It was generally understood that the company was keeping the top operating job open for him. But with Dawson moving up to president, insurance men conclude that Douglas has now decided to stay in politics indefinitely.

Along with its new president, Mutual Life is getting a new office—a brand-new 25-story skyscraper in uptown Manhattan.

• **Slow Going**—The change in Mutual Life's investment policy dates back 10 years. At the end of 1939, the company's surplus was getting low—down to about 2% of policy reserves. A life insurance company, more than most companies, needs surplus as a cushion against emergencies. For some time the company had had to dip into surplus to keep up its policy reserves.

The company took a look at its books, decided one thing wrong was its investment policy. Mutual Life was burdened with New York City commercial properties, which it had had to take over during the depression. It was also a very heavy holder of railroad bonds, many of which were still in default on interest payments.

Another trouble was that mortality experience had been worse than expected. Mutual Life took a particular beating on a disability benefit provision it had written into one of its policy contracts.

• **New Program**—So there was a change of management. Douglas, former Di-

rector of the Budget, came in as president. Alexander E. Patterson came over from Penn Mutual Life Ins. Co., became executive vice-president.

Then Mutual laid down a three-plank program. Object was: (1) to strengthen company finances; (2) to improve the sales force; and (3) to improve relations with policyholders by cutting out all red tape it could possibly spare and speeding up processing of claims.

When Douglas went to England, Patterson and Dawson continued to steer Mutual Life along these lines.

• **New Portfolio**—Dawson feels that the company has done a job in reaching those objectives. On the financial side, it has sold off nearly all its foreclosed real estate, shifted some of its mortgage holdings into home mortgages. Today only 17% of its investments are in mortgages; the average U. S. life insurance company has 22%.

The company has sold all its rail bonds, gone heavily into utility and industrial bonds. Its holdings of these securities are well above average for life insurance companies. At the end of 1949, 23% of assets were utility bonds, compared with 16% for all U. S. life companies. About 22% of Mutual's assets are in industrial bonds, compared with 14% for U. S. companies as a whole. It invested \$123.5-million in utility and corporate securities last year, including \$14-million in preferred stock.

• **Results**—Some people feel that Mutual may have been too enthusiastic in its switch. Investment yield last year was 2.82%, somewhat below Metropolitan Life Insurance Co.'s 3.07%. Some of the investment trade think that's because Mutual Life's zeal for low-yielding utility and corporate bonds had led it to drop too big a chunk of higher-yield real estate mortgages.

On the other hand, Mutual's surplus has climbed to about 9.4% of policy reserves—thanks in part to its new investment policy. Better mortality experience and higher premium rates have helped, too. That's considered to be a pretty safe cushion.

The main thing that bothers Dawson these days is the bill setting up a new income tax formula for the life insurance companies (BW—Nov. 12 '49, p90). Like president Thomas Parkinson of rival Equitable Life Assurance Society, Dawson doesn't like the retroactive feature, which makes the formula apply to income for 1947 and 1948.

THE MARKETS

Stocks: The 20 Year Benchmarks

	Industrials	Rails	Utilities
1929 High	381.17	189.11	144.61
Depression Low	41.22	13.23	14.46
1937 High	194.40	64.46	37.54
1942 Low	92.92	23.31	10.58
1946 High	212.50	68.31	43.74
Postwar Low	161.60	41.03	31.65
THIS WEEK	208.27	55.21	43.57

Dow-Jones averages for industrials, utilities are nearing 20-year highs because . . .

Market Banks on Dividends

Even if earnings drop, many companies would still be in a position to pay out at current levels. Bears meantime grumble that poor showing of penny stocks is an ominous sign.

The market has decided that business will be able to keep up corporate dividends at present or higher levels—even if 1950 earnings should drop under 1949. That's why it's possible that the industrial and utility averages may soon reach the highest levels in two decades (chart).

• **Signal**—Last week the Dow-Jones industrial average bounced up from the narrow trading range it had been in for the first 10 weeks of 1950 (BW—Feb. 25 '50, p. 112). According to Dow principles, that's supposed to be a sure sign that the market will make a major upward move.

The Dow theory is not infallible, of course. But there's no doubt that dividends can easily carry on at present levels. Companies don't need to hold so much cash now. Working capital needs are lower; and postwar expansion programs are pretty well completed.

This week the Commerce Dept. announced that cash dividends publicly reported by U.S. corporations for the three months ending with February were up 9% over the same period a year ago.

• **Preference**—Market interest has been pretty well confined to the investment-grade common stocks—the kind that make up the Dow-Jones industrial average. Although the Dow-Jones 30-stock industrial average is now only about 2% below its 1946 high, Standard & Poor's composite index of 365 industrials is still 10% below its 1946 high.

The S&P index of high-grade common stocks is only 4% below its 1946 high, while the index of low-priced common stocks is still 54% below.

Some of this preference for high-grade dividend payers traces to the investment trusts. They pour millions into such stocks every month. And that may account for the laggard performance of the rails, which command less investment prestige. Instead of "confirming" the latest rise in the industrials, the rails are going sidewise.

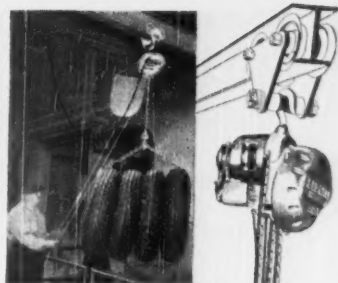
The bears—there are plenty of them around Wall Street these days (page 128)—are quick to point out the lack of speculative interest in the market.

• **Range**—One chartist says: The narrow range from which the industrial average has just emerged was the tightest for the first 10 weeks of any year since the Dow-Jones averages started in 1897. He says that a real bull market won't

Security Price Averages

	This Week	Month	Year
Stocks	Week	Mo.	Yr.
Industrial	170.6	168.3	167.9
Railroad	43.8	43.8	44.0
Utility	87.4	87.1	85.3
Bonds			
Industrial	102.2	102.3	101.9
Railroad	86.5	86.7	86.3
Utility	101.0	100.7	100.9

Data: Standard & Poor's Corp.



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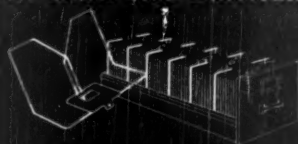
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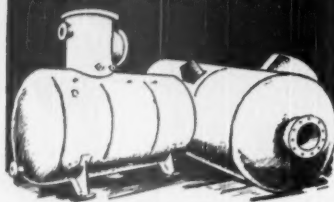
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develop unless the public gets interested in the low-priced shares. He doesn't think it will.

Another technician, who keeps his own index of blue chips paired against speculative stocks, finds that signs of market weakness are developing. He thinks that the bull market has been forming a top for the last two months.

• **Faith**—But the bulls are unshaken. They think that the lack of interest in the penny stocks is just a sign that the bull market is still in an early stage. They expect that buying of investment-grades issues eventually will spill over into speculative stocks. They point out that the utility average touched its 1946 high last week. Though it dropped a little at the middle of this week, it was still less than a point below a 19-year high.

The bulls don't feel a bit abashed

about the sideways action of the market since the start of the year. Between 200 and 212, they figure, the market has had to absorb millions of shares sold by people who acquired them at the 1946 high and now see a chance to get out even.

These traders say they aren't worried about the lagging performance of the rails. They figure that first-quarter earnings will show a definite improvement over last year. They think this will be enough to carry the rail group along with the other two Dow-Jones averages.

• **Volume**—The bulls point out that volume has been in gear with prices lately. When the industrials broke out of their narrow price range last week, there was plenty of volume. When prices fell off a little early this week, so did volume.

Short Position Keeps Growing

Short interest is higher now than it's been for 18 years. That strengthens the market's technical position.

The short-interest prop under present stock market price levels has been strengthened some more.

Bears were short 2,573,569 shares of Big Board stocks on Mar. 15. That's about 223,000 more than the total on Feb. 15, and the biggest four-week hike since last July. Not since May 19, 1932, when the total was only some 27,000 shares larger, has the New York Stock Exchange reported a greater short interest.

• **No Bother**—It doesn't bother the bulls, though, to see the bears getting new recruits. In these times, bulls think that a steadily increasing short position strengthens the market technically.

Here's why: One of these days many a current short position will start to be covered. If the coverings are touched off by frightened buying as the market

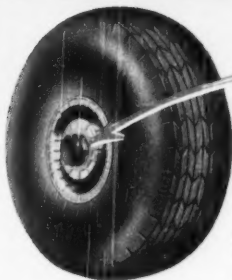
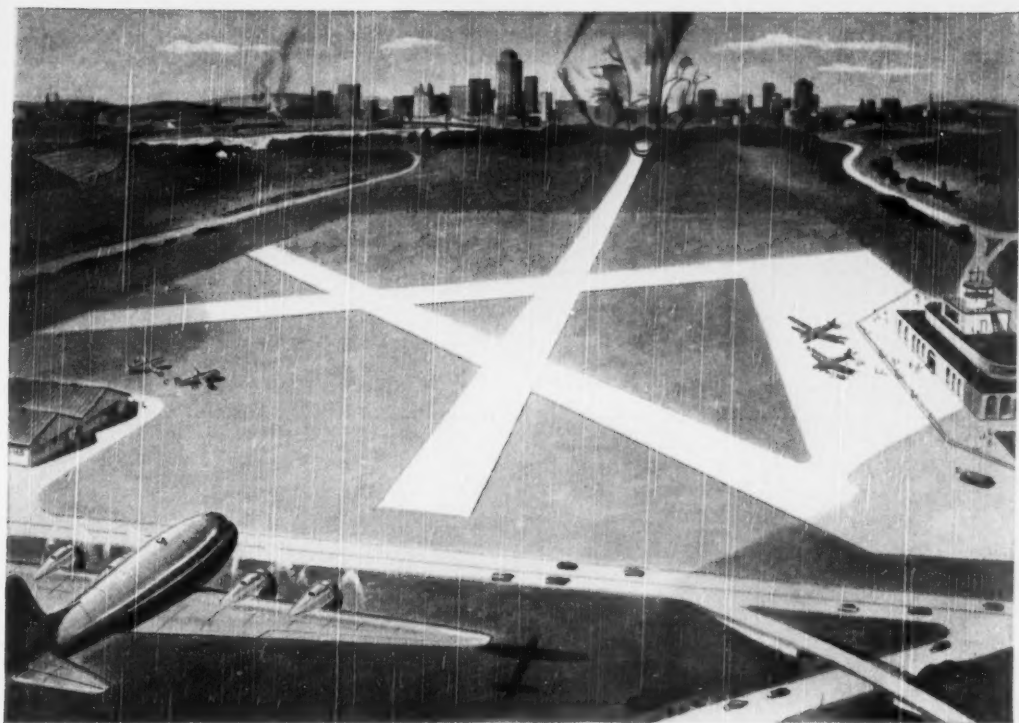
is moving up, so much the better; any rush to cover will add push to the rise under way. If such covering takes place while the market is going down, the market will get a load of buy-orders to cushion its decline.

• **Broad Area**—Short accounts showed significant climbs last month in such star television performers as Admiral Corp., Avco Mfg., Zenith and Sparks-Withington commons. But the market's short position wasn't dominated by the TV shares.

Short positions, in fact, existed in 928 of all the 1,460 individual issues listed on the Big Board on Mar. 15. And there were 126 in which shorts had positions of 2,400 or more shares.

Here are 37 issues in which short positions of over 15,000 shares existed on Mar. 15:

Stock Issue	Short Interest	
	Mar. 15, 1950	Feb. 15, 1950
Admiral Corp.	79,629	65,307
American Woolen.	41,739	33,730
Avco Mfg.	40,000	22,500
Balto. & Ohio.	15,935	16,145
Bethlehem Steel.	23,377	21,130
Chrysler Corp.	41,497	44,372
Curtiss-Wright.	31,730	44,620
Du Pont.	21,345	21,985
General Motors.	36,359	34,472
Graham-Paige.	25,785	9,495
Hudson & Manhattan.	21,440	18,940
Hudson Motor.	61,021	66,920
Illinois Central.	42,553	41,558
International Paper.	44,020	43,515
Int'l Tel. & Tel.	21,601	22,366
Mack Trucks.	15,155	15,657
Magnavox Co.	32,965	40,485
Mo.-Kan.-Tex. Pfd.	30,023	32,628
Nash-Kelvinator.	17,785	16,750
Sears, Roebuck.	20,334	19,041
Southern Pacific.	29,811	31,387
Southern Ry.	17,592	18,952
Standard Gas & Electric \$4 Pfd.	21,271	22,712
Studebaker Corp.	67,430	66,701
Sunray Oil.	18,265	10,545
Tri-Continental Corp.	26,125	24,925
United Corp.	20,000	5,400
U. S. & Foreign Sec.	23,367	22,712
U. S. Steel.	62,825	56,640
Western Maryland.	15,725	13,850
Western Union.	18,945	22,397
Zenith Radio.	15,174	6,030



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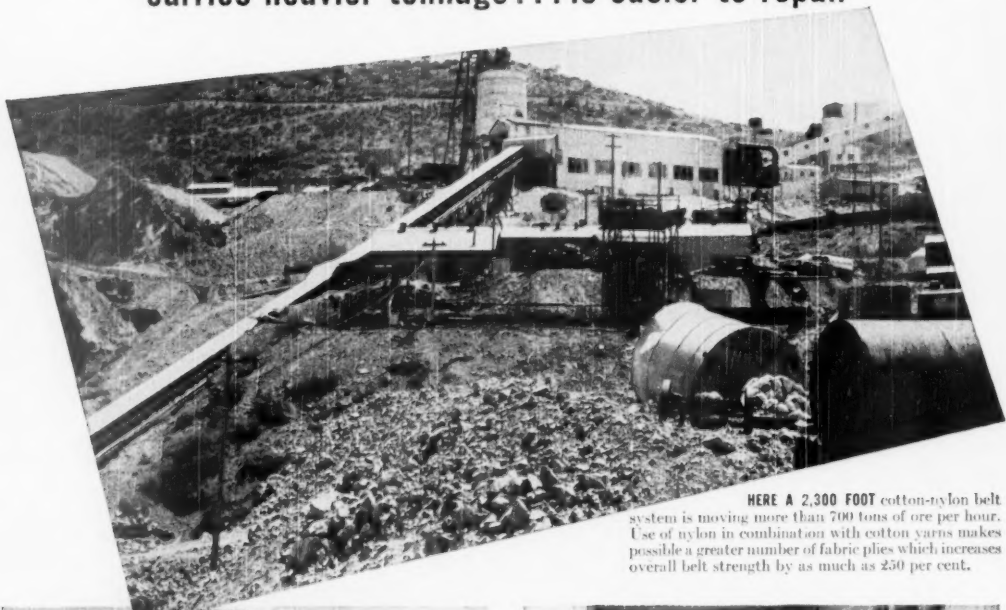


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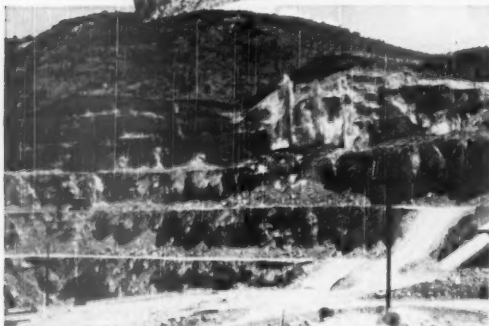
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INTERNATIONAL OUTLOOK

BUSINESS WEEK

MARCH 25, 1950



Politics have temporarily paralyzed U. S. foreign policy. Hard decisions are being dangerously postponed:

How far is the U. S. willing to go in helping Tito?

How soon will aid be moving to Indo-China?

How will the U. S. meet another British financial crisis?

Quick answers to these—and other—problems are needed. Each depends to some degree on Congressional support. But the Secretary of State has had to drop everything to defend himself.

•
Acheson is getting it from all sides—mostly from Republicans, but from a few Democrats, too.

Some Republican strategists want to use him as an example to show that the whole Truman Administration is full of "socialists." Then, too, a surprising number is still fighting the lost battle of China. (Note that almost all Sen. McCarthy's victims were connected with U. S. China policy in one way or another.)

Some members of both parties want to see Acheson out because he opposes a dramatic approach to the Russians now. Not a few Democrats have kept silent for fear McCarthy might find another Alger Hiss in some closet. Such a windfall, they think, could cost many Democrats their seats.

•
Acheson is hitting back as hard as he can.

In San Francisco last week, he again reminded his China critics that the Russians got control of China without giving one tenth the aid we gave Chiang Kai-shek.

In Berkeley, he repeated his plea for "total diplomacy"—the alternative between trying to be "intimate" with the Russians and going to war. (State Dept. officials fear that if Acheson's plea is ignored, U. S. foreign policy will drift towards one or the other of these extremes.)

But the rift between Acheson and Capitol Hill has stymied the State Dept. even in its dealings with other government departments. Western diplomats in Washington are openly "shocked" at the effect this dissension is having abroad. Chances are that before long the President will have to do some hasty repair work.

•
Europeans are wondering if Yugoslavia is one of Acheson's "strong points"—where all-out aid will be sent to oppose a Russian attack.

Growing weakness in France and Italy make the coming months ideal for an armed Russian coup against Tito. It could well be over before the U. S. made up its mind what to do about it.

Many observers believe Yugoslavia is the key to the whole western position in Europe. A quick and successful Russian move there could scare France and Italy into neutrality. That would undermine the North Atlantic Pact—a primary Communist objective.

•
The State Dept. wants to channel as much aid to Indo-China as possible—directly to Bao Dai. That means bypassing the French, but it would bring greater U. S. prestige in Asia.

Ambassador Jessup dropped the hint in Paris last week, and drew a sharp reaction. The French are afraid such a policy would undermine their position more than it would build up the U. S.

Here's a possible solution: Economic aid will be given directly to Bao Dai. But a mixed commission—including U. S. and French representatives—will

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

MARCH 25, 1950

be set up to advise him how to spend it. Military aid will be given to the French who command Bao Dai's armies.

An Anglo-American plan for southeast Asia should be ready for discussion at the foreign ministers' conference in Paris next month.

Western diplomats still face opposition from India and Indonesia. Neither country wants to recognize Bao Dai. India is against joining any program outside the United Nations. Indonesia might follow this line, too.

Russia may counter with another Asian conference of its own. Russia's puppet in Indo-China, Ho Chi Minh, is on his way to Moscow. And Russian diplomats in New Delhi are keeping the pressure on Nehru to stay out of any U. S.-influenced programs.

Russia seems about to steal another march on the West in Japan.

Moscow is reported ready to (1) grant Japan priority trading rights in China; and (2) give back the Kurile Islands, annexed from Japan after the war. Both ideas will go down well with the Japanese.

Meanwhile, there are no signs of a peace treaty for the Japanese in Washington. Officials concede that Japan will never be able to pay its own way without trading with China. But they keep arguing over U. S. strategic commitments.

British Commonwealth nations are drafting a treaty of their own in London. Chances are something will be ready for the Paris foreign ministers' meeting in April.

Look for Japan to join the International Wheat Agreement by summer.

Germany was voted in last week. But the British vetoed Japan. Reason: Britain is afraid Japan would (1) bid up the price of Australian wheat; or (2) force the British to pay more dollars in the U. S. or Canada.

Both the U. S. and Australia want Japan in, of course. The Australians want more buyers. The U. S. thinks Japan will save money over the long run by getting some of its wheat at the reduced agreement price.

Look for an Export-Import Bank credit to Argentina soon.

Peron has found a way to get around the political liability of a direct loan. He's suggesting to U. S. farm machinery exporters that they apply at Ex-Im Bank for an exporter credit. Argentina's Banco Central has indicated it would guarantee such a credit.

Peron's credit rating is improving. For almost a year now he has kept his promise to devote 30% of his monthly dollar earnings to pay off back debts to U. S. exporters. The backlog is now well under \$100-million.

General de Gaulle and Winston Churchill both have now called for a Franco-German anti-Communist union. They want to rearm the Germans.

The Conservative leaders of Britain and France feel the Atlantic Pact can't defend western Europe. Since de Gaulle and Churchill stand a pretty fair chance of being returned to power within the next year or so, this may be a tip to a new blueprint for western Europe: military security at any cost.

Most French leaders, though, still don't see any security in a rearmed Germany.

Sign of the times: The French National Assn. of Manufacturers has suggested that the government launch a 150-billion franc housing and public works program. Object: to sop up French unemployment and production.

BUSINESS ABROAD



COMMUNIST BIGWIGS review May Day activities from party headquarters in Prague. Today they're aiming for the complete "Stalinization" of Czechoslovakia.



CZECH WORKERS resent speedup, wage cuts. They represent trouble for regime.

Czechs Start Into the Wringer

Party purges announce drive to "Stalinize" Czechoslovakia, harness added production to Russian economy.

The squeeze is on in Czechoslovakia. The Kremlin has started an all-out drive to "Stalinize" the one-time western democracy—now Russia's most valuable satellite.

• **"Londoners"**—The western world got the official announcement last week when Czech Foreign Minister Vladimír Clementis got the heave-ho from the Czech cabinet. Clementis' crime: He spent his wartime exile in London. A long list of lesser "Londoners" have already been purged.

The man behind the purge is Rudolf Slansky, general secretary of the Czech Communist Party and special favorite of the Russian secret police. In the past six months Slansky has chopped an estimated 250,000 names off the Czech Party list. Another 250,000 are supposed to go this year.

• **The Wringer**—The Russian objective in Czechoslovakia is the same as in the rest of eastern Europe—to harness all available productive capacity to the Russian economy. Dr. Dolansky, Czech Minister of State Planning, has announced that exports to Russia must go up faster than ever. In 1947 the Czechs shipped a paltry \$25-million

to the U.S.S.R. In 1948 the figure jumped to \$120-million; last year it hit an estimated \$200-million. This year Moscow is demanding 20% more—half of which must be machinery.

On top of this the Czech capital investment program is slated to go up 50% this year over 1949. Big item is additional war plants that the Russians want to see built in remote Slovakia. To do this the Czechs have no alternative but to increase productivity and cut real wages at the same time. Czech labor, even though it paved the way for the Communist rise to power, is not likely to take this lying down.

• **Not "Stalinized"**—For despite two years under a Communist dictatorship, Czechoslovakia is not yet a completely "Stalinized" satellite. True, 97% of industrial production and 75% of distribution is in the hands of a thoroughly communized administration. But 20 years under a western democratic system have left their mark.

The labor unions, while outwardly in the hands of the state bureaucracy, are still not the "labor fronts" that existed in Nazi Germany or exist in Soviet Russia. Strikes break out from

time to time. And the "Udarniki" movement—the Czech version of the Stakhanov system, where the exceptionally fast worker sets the norm for the rest—is bitterly resented. In the days of Czech democracy, the speedup was the bete-noir of the unions.

And by and large Czech farmers are still not collectivized. The Czech land reform of 1946 did give about 30% of the farmers new land—either taken from the Germans or expropriated from large estates. These farmers may support the present Communist regime, but the majority of Czech peasants still value their property just as any American farmer does.

The official Communist propaganda agency blares forth 24 hours a day. But between 20% and 30% of the population has radios which are tuned in regularly to the voice of America, BBC, and Radio Vatican. The church is state controlled, but still is not an instrument of the state.

• **Trade Trouble**—All these factors have made the Russians go slow in their drive to sovietize Czechoslovakia. They will make for trouble now. But there is an even more important obstacle in the Russians' path—trade with the West.

The Czechs depend so heavily on the West for raw materials that even

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UNRATIONED CANDY is available in the "workers' paradise." Elimination of the Czech middle class has improved workers' lot—but now pinch is on them.

a minor trade crisis will endanger the country's industrial output. While Russia took 40% of Czechoslovakia's exports in 1949, it supplied only 15% of Czechoslovakia's imports.

Gold and hard-currency loans from Moscow enabled the Czechs to balance their trade with the West last year. The Russians put up about \$100-million and the Czechs reduced their gold reserves from about \$80-million to \$60-million. This year, if Moscow gets its added pound of flesh, Czechoslovakia's deficit with the West will go up more.

• **Premium Prices**—At the same time, the Czechs will be faced with a tougher selling job in western Europe and rising prices for the raw materials they need. To top it off, the Czechs must pay premium prices in the black markets of South America and the Far East to get the vital machinery that the U. S. refuses to sell them.

Russia's answer to this dilemma is: Cut production costs, soak the capitalists, and cut all possible ties with the West. To cut production costs means, for the most part, to cut wages. The Czechs can still cut some cultural ties with the West, but they can't cut all business ties and still hope to meet Moscow's production goals. And in Czechoslovakia there are very few capitalists left to soak.

• **Vanishing Middle Class**—Since the Communist coup in 1947, 10,000 private companies in wholesale business have been merged into 32 state units. Retail trade is nationalized down to the last one-man butcher shop. From 1,000 private foreign trade houses, 29 state corporations have been formed. These manipulations have virtually crushed the whole Czech middle class.

Earnings of the Czech middle class have been cut down to 15% or 20% of normal. Thousands of this shopkeeper group are spread throughout Czechoslovakia's 50 slave labor camps.

• **Workers Benefit**—By wringing the wealth out of the middle class (which



LIFELONG COMMUNIST Vladimir Clementis had a "western taint," lost his job last week.

made up roughly 35% of Czechoslovakia's population before the war), the country so far has been able to maintain a relatively easy economic level for the working class. Right now prices are stable and food is sufficient. Consumer goods are available at prices from 30% to 50% higher than in the West, but they're still only a fraction as high as prices in the Soviet Union.

By European standards, the Czech worker is undoubtedly well off. On the average he earns between \$60 and \$70 a month, from which 12½% is deducted for taxes, union fees, social security, etc.

• **Trouble Coming?**—But now that the ax seems about to fall on the workers themselves, Moscow is sure to run into trouble. The Czechs are past masters of the art of passive resistance. And a breakdown in the Czech industrial machine will hit the Russians hard.

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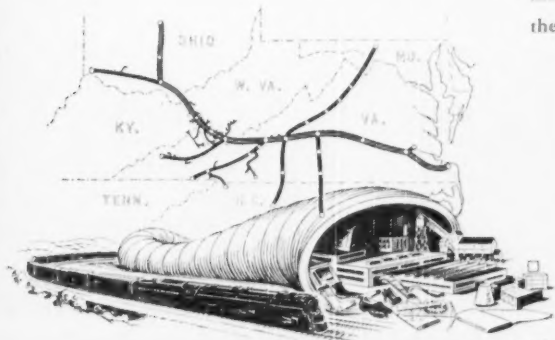
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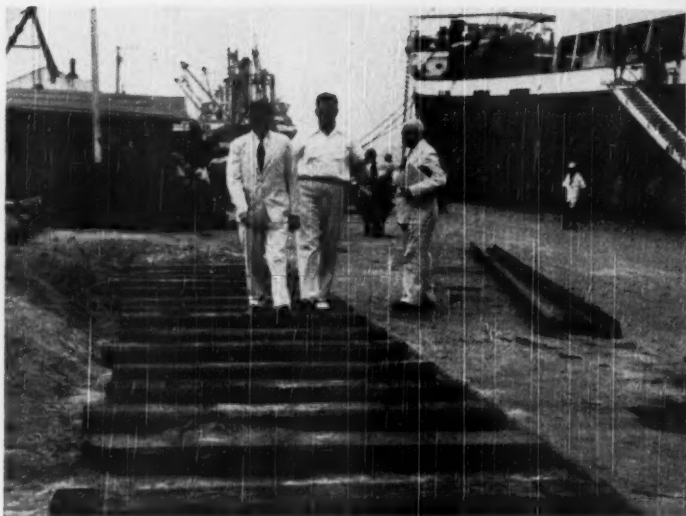
The Board of Directors of THE KNOTT CORPORATION has this day declared a dividend of 65¢ per share payable on March 17, 1950 to stockholders of record at the close of business on March 9th, 1950.

March 2, 1950



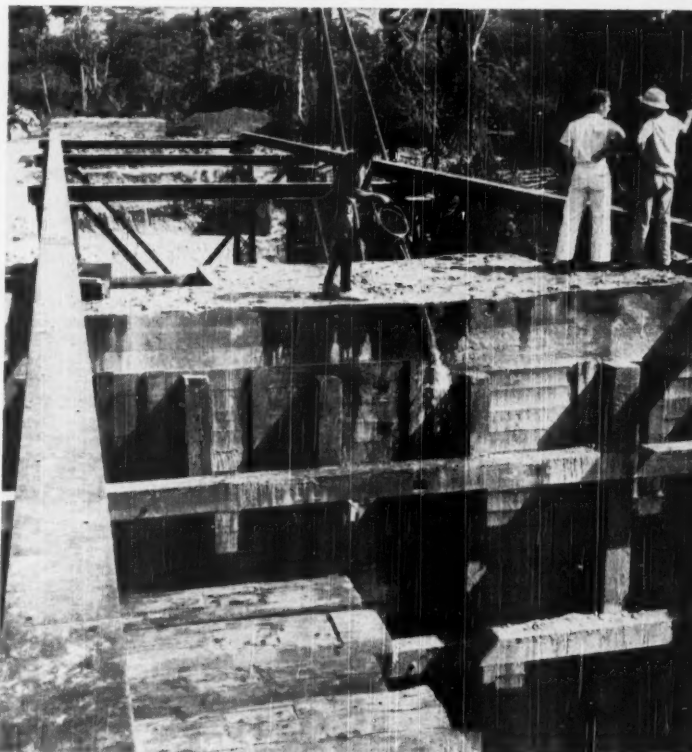
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Liberia Builds First Railroad



BRIDGE will ford Kpo River. Railroad builders have rugged bush country to hack through swamps and rivers to span, but no hills to tunnel or blast. Line will be 45-mi. long.



ADBED parallels new motor road. Before, trails were only route to ore region.



PRIMITIVE FERRY crosses Maher River. road bridge will be built here, too.

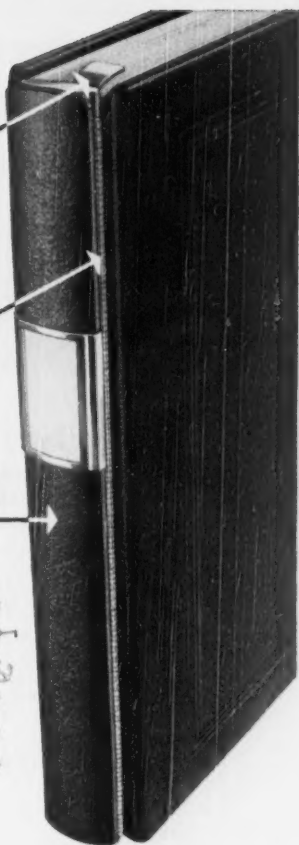








MI HILLS—rich in ore—loom at end of road. (TURN TO PAGE 135)

LOOK FOR
This Lock

LOOK FOR
This Hinge

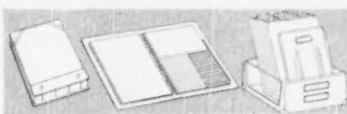
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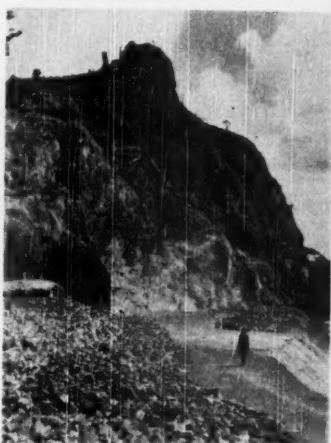
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LIBERIA (Cont'd from page 137)



END OF THE LINE: Ore piled up at base of cliffs waits for the railroad to come.

Come and Get It

Liberia's new railroad will bring out 1-million tons a year from Bomi Hills deposits. Republic Steel will take half.

Liberia is getting its first railroad—a narrow-gauge line through the jungle from the port of Monrovia to the iron-rich Bomi Hills, 45 miles to the north.

The \$2-million railroad is being built by the Liberia Mining Co., part-owned by Republic Steel Corp., Cleveland. Libminco has a concession from the Liberian government to exploit the Bomi Hills area, is backed by a \$4-million Export-Import Bank loan and a \$1-million loan from Republic. The steel company will buy at least half of the Bomi Hills ore—for its mills in Alabama and Ohio.

• **Good Pickings**—Bomi Hills ore is worth getting at. The pure iron content of the ore averages about 68.9%. U.S. Mesabi ore assays as at a little better than 50% (BW—Feb. 11 '50, p19). Geologists have so far proved the presence of 30-million tons of high-grade ore in the Bomi Hills. Chances are they'll find more within the 40-mi. radius of the concession.

Libminco hopes to have U.S.-made rolling stock hauling ore to the docks in Monrovia by March, 1951. So far, 13 miles of roadbed have been excavated, and tracklaying has begun. Before they're through, Libminco engineers will have hacked through thick jungle brush, spanned two rivers with steel bridges, crossed swamp areas with 18 reinforced concrete bridges. Among

other things, they've had to contend with a ground termite called the "bug-abug." It can eat its way through ordinary railroad ties in a matter of days. So Libunco had to fell 7,000 hardwood trees—such as black gum and ironwood—to make ties that would last.

BUSINESS ABROAD BRIEFS

Irish shipbuilders, Harland & Wolff, will manufacture Copper-Bessemer's line of air compressors and engines for sterling-area markets.

A factory in Johannesburg is in the works for Link-Belt Co. A new subsidiary, Link-Belt Africa, Ltd., will supply elevating, coal-cleaning, and excavation equipment to South African industry.

Port of Boston is starting an all-out campaign for foreign trade. Harbor development plans call for new piers, freight and passenger terminals.

All labor controls have been officially dropped by Britain. The government has told no worker what to do or where to go, since December, 1948. But fringe controls have remained.

World ship launchings hit more than 3,130,000 gross tons of merchant vessels in 1949, greatest volume for any peacetime year since 1921. Great Britain and Northern Ireland spilled the most champagne.

Ruble revaluation will boost the costs of operating the U.S. embassy in Moscow by \$108,000 for the last half of this year. Next year, the U.S. will pay \$742,000—just about double the 1950 figure.

An ocean-to-ocean pipeline is under way for Mexico's government oil monopoly. The 155-mi. line will link a refinery on the Gulf coast with the Pacific port of Salina Cruz.

Mexican television is next. Promoters think they'll hit the jackpot with bullfight broadcasts in Mexico City.

A round-Africa cruise—91 days, 20 ports of call—will be offered next year by Cunard Lines. First class rate: \$1,530 and up.

Aluminum prefabs—homes and schools—will be assembled in Australia by Britain's Bristol Aeroplane Co. Bristol also builds the Brabazon, a turbojet transport.

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The Case Against the Mills Bill

There is something ominous about the way congressional discussion of tax reform keeps looping back to the idea of speeding up the collection of corporate taxes in 1951. It's ominous because it shows that Congress still won't face up to the hard facts of our fiscal situation.

Congress is understandably unhappy about the spot it is in. Even without badly needed tax reforms, President Truman's budget for fiscal 1951 will show a deficit of about \$5-billion. Any attempt to reform our painful and dangerously burdensome tax system will automatically increase that deficit—unless Congress can somehow bring itself to cut expenditures. And cutting expenditures in an election year is something that every congressman tries to duck.

The speedup idea—usually called the Mills bill because it was originally sponsored by Rep. Wilbur Mills—seems to offer an alluringly simple way out (page 94). On its face, it would boost revenues without increasing the tax burden. That's a neat trick if you can pull it off.

Under present law, corporations pay their taxes in four instalments spread out through the year following the year to which the tax applies. This year, for instance, they will be paying up their 1949 liabilities. Next year, they will start paying the taxes due on 1950 income.

The Mills plan would accelerate collections by requiring corporations to pay all their 1950 taxes in two instalments in the first six months of 1951 instead of spreading payments over the whole year.

Over the long run this would make no difference in the total amount of taxes due. But in the year when the switch was made it would produce a big jump in government revenue. The Treasury would cram a year and a half of tax collections into a single 12-month period. In fiscal 1951, this would boost its take by something like \$5-billion.

It looks too good to be true—particularly to a congressman who desperately wants a way of raising revenues without slapping on new taxes.

Tricky Bookkeeping

It is too good to be true. Fundamentally, it's nothing but tricky bookkeeping. It wouldn't solve any of the government's fiscal problems. It would merely permit Congress to duck them for another year.

When fiscal 1952 rolled around, revenue would drop back again. Congress would find itself right back where it is now—with another year of deficit financing and outsize expenditure programs behind it.

Financial window-dressing may be useful for a hole-in-the-wall operator who is trying to impress his creditors. But it's no way to handle government finances. If we have to run a deficit in fiscal 1951, we will be a great deal better off if we admit it frankly instead of trying to doctor the books to cover it up.

There's another good reason for turning thumbs down

on the Mills bill or any variation on the same theme. It would exaggerate the unstabilizing effect that the federal budget already has on business.

Even with its present methods of collection, the government takes in most of its revenues during the first half of the calendar year. During this time it often runs tremendous surpluses. In the last six months of the year, it usually spends more than it collects.

All this puts a lot of artificial and unnecessary strain on the flow of income and credit through the economy. In the first half of the year, the government is sopping up purchasing power from individuals and corporations. In the second half, it is pouring money back into the system, automatically boosting purchasing power.

The Mills bill would concentrate revenues even more heavily in the first half of the year—not only in 1951 but in all years after that. And it would increase the size of the deficit in the second half year.

In this respect, it would be a step in the wrong direction. We have enough unavoidable seasonal strains on the economy without introducing any artificial ones. One big object in fiscal planning should be to level government receipts and expenditures as much as possible over the year. The Mills bill would work just the other way.

Why Pay-As-You-Go?

There's one other point to be considered. Would there be any advantage in putting corporate taxes on a pay-as-you-go basis similar to individual income taxes? If so, the Mills bill could be a step in that direction.

Theoretically, pay-as-you-go is a good idea. It gears tax collections closely to the flow of income. It helps to keep the government's fiscal policy from getting out of step with the rest of the economy.

But pay-as-you-go for corporations runs into some big practical objections. Corporate incomes fluctuate widely—much more than individual incomes. It's impossible to make any good advance estimate of what they will be. Hence, a true pay-as-you-go system for corporations would probably bog down almost as soon as it started.

Add all this up, and you come out with a strong case against the Mills bill. Its advantages are illusory; its drawbacks are real.

But rejecting the Mills bill doesn't solve the government's financial problems. To make a start on that, Congress must also reject the whole idea behind the Mills bill—the idea that everything will be all right if somehow we can make the books show a year-to-year balance of receipts and expenditures.

Receipts and expenditures in any one year aren't the important thing. The real answer to the fiscal problem is to set up a well-planned, efficient tax system and then gear our expenditure programs to it. Until we do that, no amount of fancy bookkeeping can help us.

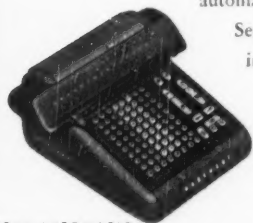


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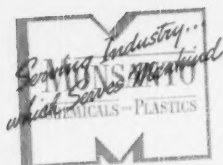
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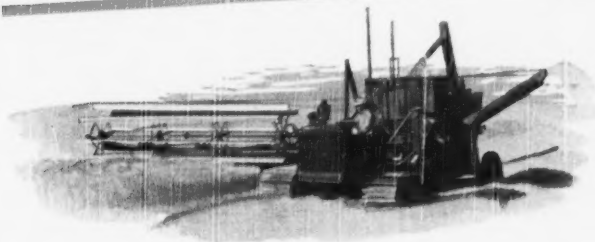
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MANUFACTURERS PROFIT EVERY DAY

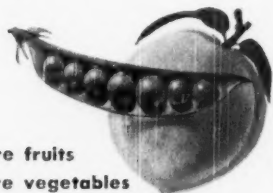
Agriculture is only one of more than 40 important industries served by Monsanto chemicals and plastics. They are used daily in literally thousands of other industry applications—leading business to new profits in production, products, sales. If you inquire, you will probably find Monsanto products which can be helpful to you.



MORE BUSHELS

...MORE DOLLARS

Unless bugs and weeds are kept under control, they destroy about one tenth of the nation's crops every year. This means the loss of one hour out of every ten, one bushel out of every ten, one dollar out of every ten . . . Plan now to stop this frightful waste! Harvest more bushels and more dollars—use Monsanto chemicals contained in agricultural insecticides and herbicides made and sold by leading formulators.



more fruits

more vegetables

One of the most effective Monsanto chemicals used to increase fruit and vegetable yields is Nifos*-T. It is very potent in weak solutions—residual toxicity is negligible . . . Niran,* Monsanto's parathion, is one of the newer insecticidal chemicals. Because it is extremely toxic, it must be handled and applied with great care.

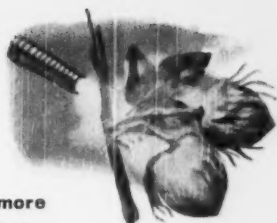
more grains

Formulations of Monsanto 2,4-D are highly effective in destroying weeds that choke and smother growing grains. Since this important chemical is "selective" in action, it attacks and destroys weeds only; doesn't harm grain . . . DDT is another valuable Monsanto chemical—used in insecticide formulations to control corn borers.



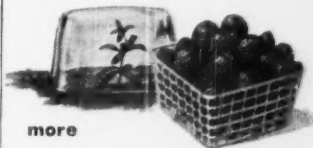
more acres

One of the more recent Monsanto herbicidal chemicals is 2,4,5-T. It is especially effective in destroying heavy, fibrous, woody weeds, thus restoring more acreage to productive use. It eliminates many weeds that resist 2,4-D, such as brambles, briars, poison ivy. Also recommended for clearing rights-of-way . . . Another chemical useful in all types of liquid solutions is Santomerse.* The addition of this wetting agent causes the solution to spread more rapidly and completely over surfaces to which it is applied.



more bales

Cotton growers get more bales per acre by using formulations of Monsanto DDT. Applied as a dust when cotton forms into squares, it checks boll weevils—promotes greater yields, more dollars per acre . . . Still another chemical especially useful in all dust formulations is Santocel.* This Monsanto silica aerogel acts as an anti-caking agent; permits free flow and more effective application of dry powders.



more sales

Monsanto Plastics, too, find wide use in agriculture. Examples: A clear Lustrex* "Hotouse" plant cap, used to replace paper, assists germination and growth . . . A new Lustrex berry box offers many sales advantages. Better ventilation assures less spoilage—entire contents are visible—can be washed without removal from the box.

more information

Formulators of insecticides and herbicides can get more information on Monsanto agricultural chemicals by checking and returning the coupon or writing MONSANTO CHEMICAL COMPANY, 1724 South Second Street, St. Louis 4, Missouri. *Reg. U. S. Pat. Off.



FORMULATORS AND MANUFACTURERS—Please check information you want...then fill in the coupon and return to Monsanto

- | | |
|---|--|
| <input type="checkbox"/> Weed control, grains | <input type="checkbox"/> Plastic berry boxes |
| <input type="checkbox"/> Weed control, brambles, briars | <input type="checkbox"/> DDT |
| <input type="checkbox"/> Weed control, rights-of-way | <input type="checkbox"/> 2,4-D |
| <input type="checkbox"/> Wetting agent, Santomerse | <input type="checkbox"/> Nifos-T |
| <input type="checkbox"/> Anti-caking agent, Santocel | <input type="checkbox"/> Niran |
| <input type="checkbox"/> Plastic "Hotouse" caps | <input type="checkbox"/> 2,4,5-T |

MONSANTO CHEMICAL COMPANY
1724 South Second Street, St. Louis 4, Missouri

Please send information on products checked at the left to—

Name _____ Title _____
Company _____
Address _____
City _____ State _____